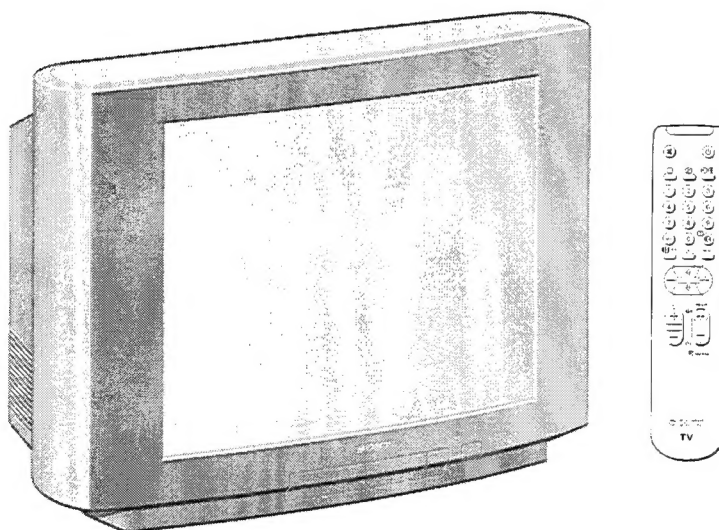


# SERVICE MANUAL

# BE-3D CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-29C1A	RM-839	Italian	SCC-K05D-A	KV-29C1E	RM-839	Spanish	SCC-K06D-A
KV-29C1B	RM-839	French	SCC-K01D-A	KV-29C1K	RM-839	OIRT	SCC-K08F-A
KV-29C1D	RM-839	AEP	SCC-K07D-A	KV-29C1R	RM-839	OIRT	SCC-K08G-A
KV-29C1D 1	RM-839	AEP	SCC-K07J-A				



TRINITRON® COLOR TV  
**SONY®**

ITEM	MODEL	Television System	Channel Coverage	Colour System
Italian		B/G/H	VHF: E2-E12, S1-S20, A-H, H1, H2 UHF: E21-E69	PAL NTSC3.58/4.43 (video input only)
French		B/G/H, D/K, L, I	L SECAM VHF: F2-F10 UHF: F21-F69 TV CABLE TV (1) VHF: B-Q UHF: S21-S44 PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 PAL I UHF: B21-B69 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46	PAL, SECAM NTSC3.58/4.43 (video input only)
AEP		B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46	PAL, SECAM NTSC3.58/4.43 (video input only)
Spanish		B/G/H, D/K	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46	PAL, SECAM NTSC3.58/4.43 (video input only)
OIRT		B/G/H, D/K	B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46	PAL, SECAM NTSC3.58/4.43 (video input only)

MODEL	29C1A	29C1B	29C1D 29C1D 1	29C1E	29C1K 29C1R
Power Consumption	85W	95W	95W	95W	95W

## SPECIFICATIONS

Picture Tube Super Trinitron  
Approx. 72 cm (29 inches)  
(Approx. 68 cm picture measured diagonally)  
110° -deflection

### Rear/Front Terminals

#### [REAR]

- ➡ 1 21-pin Euro connector (CENELEC standard)
  - Inputs for audio / video signals
  - Inputs for RGB
  - Outputs for TV audio and video signals
- ➡ 2/➡ 3 2, 21-pin Euro connector (CENELEC standard)
  - Inputs for audio / video signals
  - Inputs for S video
  - Outputs for TV audio and video signals (selectable)

#### [FRONT]

- ➡ 3 . Video input - phono jack
- ➡ 3 . Audio inputs - phono jacks
- ➡ 3 . S video input - 4 pin DIN  
(KV-29C1D 1 does not have ➡ 3, ➡ 3 or ➡ 3)
- 🎧 Stereo minijack - headphone jack

#### Sound output

Left/Right 2x5W (RMS)  
2x10W (music power)

Dimensions 794x567x533 mm approx.

Weight Approx. 43.0 kg

Supplied accessories RM-839 Remote Commander (1)  
Batteries R6 (2)

Other features Fastext, TOPTEXT

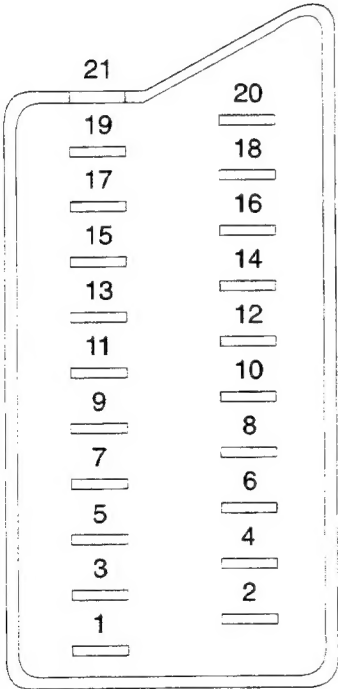
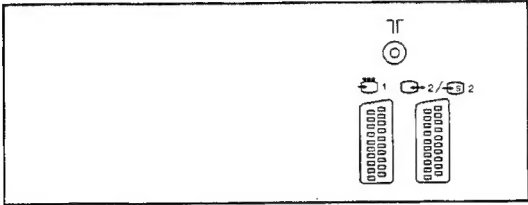
## [RM-839]

Remote control system Infrared control  
 Power requirements 3V dc (2 batteries) R6 (size AA)  
 Dimensions Approx. 210x45x24 mm (w/h/d)  
 Weight Approx. 91g (Not including battery)

**Design and specifications are subject to change without notice.**

Model name Item	KV-29C1A	KV-29C1B	KV-29C1D	KV-29C1D 1	KV-29C1E	KV-29C1K KV-29C1R
PIP	OFF	OFF	OFF	OFF	OFF	OFF
MPIP	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	OFF	ON	ON
Scart 4	OFF	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON
TXT	ON	ON	ON	ON	ON	ON
FLOF	ON	ON	ON	ON	ON	ON
TOP	ON	ON	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON	ON	ON
Norm I	OFF	ON	OFF	OFF	OFF	OFF
Norm D/K	OFF	ON	ON	ON	ON	ON
Norm AUS	OFF	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF	OFF	OFF
Language Preset	Italian	French	German	German	Spanish	OIRT

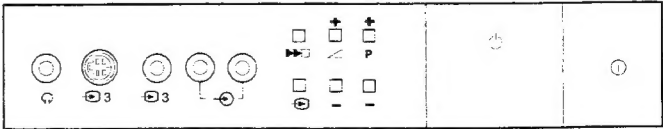
21 pin connector (→ 1, → 2 / → S 2)



Pin No.	1	2	4	Signal	Signal Level
1	○	○	○	Audio output B (Right)	Standard level : 0.5V rms Output impedance : Less than 1k ohms*
2	○	○	○	Audio input B (Right)	Standard level : 0.5V rms Output impedance : More than 10k ohms*
3	○	○	○	Audio output A (Left)	Standard level : 0.5V rms Output impedance : Less than 1k ohm*
4	○	○	○	Ground (Audio)	
5	○	○	○	Ground (Blue)	
6	○	○	○	Audio input A (Left)	Standard level : 0.5V rms Output impedance : Less than 10k ohm*
7	○	●	●	Blue input	0.7 ± 3dB, 75 ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (Green)	
10	○	○	○	Open	
11	○	●	●	Green	
12	○	○	○	Open	
13	○	○	○	Ground (Red)	
14	○	○	○	Ground (Blanking)	
15	○	—	—	Red input	0.7 ± 3dB, 75 ohms, positive
	—	○	○	(S signal) chroma input	0.7 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Y's signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (Video output)	
18	○	○	○	Ground (Video input)	
19	○	○	○	Video output	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
20	○	—	—	Video input	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
	—	○	○	Video input Y (S signal)	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (Open) \* at 20Hz - 20kHz

Pin No.	Signal	Signal Level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm, positive Sync. 0.3V -3 + 10dB
4	C (S signal) input	0.3V ± 3dB 75ohm, positive Sync.



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**CAUTION**

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

**WARNING !!**

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.  
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

**SAFETY-RELATED COMPONENT WARNING!!**

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.


**ATTENTION**

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

**ATTENTION !!**

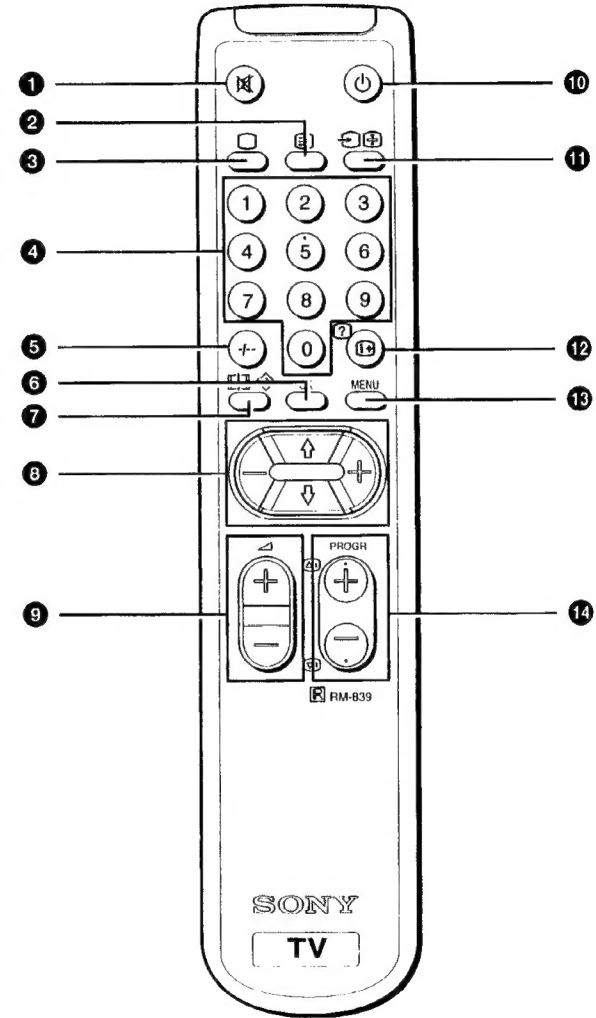
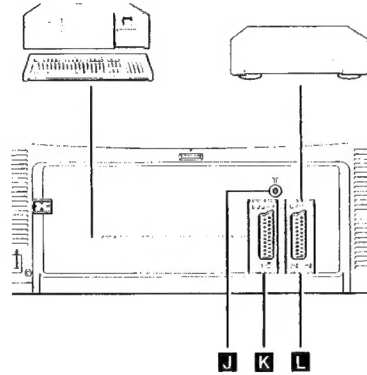
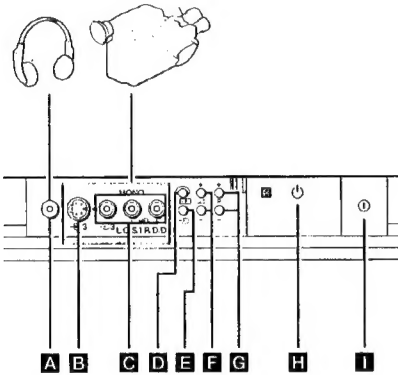
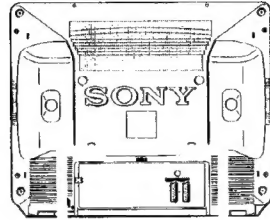
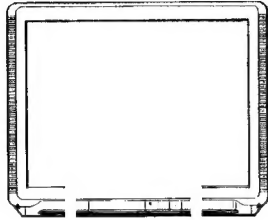
AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

**ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!**

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

## SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

















## Overview

### Overview













This section briefly describes the controls and the buttons on the TV set and on the Remote Commander. Please open the flap at the front of the instruction manual for illustrations of the TV set and the Remote Commander. Letters in boxes refer to the buttons on the TV set, numbers in circles to the buttons on the Remote Commander. For more information, refer to the page numbers given next to each description.

#### TV buttons and Terminals

Reference and Symbol	Name	Refer to Page
<b>Front of the set</b>		
<b>A</b> 	Headphones jack	4
<b>B</b>  3	S video input jack	29
<b>C</b>  3,  3	Audio/video input jacks	29
<b>D</b> 	Automatic Preset button	11
<b>E</b> 	Input mode button	13
<b>F</b>  +/-	Volume control	12
<b>G</b>  P +/-	Programme button	12
<b>H</b> 	Standby mode indicator	12
<b>I</b> 	Main power switch	12
<b>Rear of the set</b>		
<b>J</b> 	Aerial socket	10
<b>K</b>  1	21 pin Euro connector	29
<b>L</b>  2 /  2	21 pin Euro connector	29

## Overview

### Remote Commander Operation

Reference and Symbol	Name	Refer to Page
<b>1</b> 	Muting on/off button	12
<b>2</b> 	Teletext button	13
<b>3</b> 	TV power on/TV mode button	12, 13
<b>4</b> 1, 2, ..., 9, 0	Number buttons	12
<b>5</b> - / - -	Double digit entering button	12
<b>6</b> OK	OK (Confirmation) button	14
<b>7</b>  / 	Screen format button Teletext: Favourite pages button	12, 28
<b>8</b> 	Menu control	14
<b>9</b>  +/-	Volume control button	12
<b>10</b> 	Standby button	12
<b>11</b>  / 	Input mode button Teletext: Freezing the subpage	13, 27
<b>12</b>  / 	On-screen display button Teletext: reveal button	12, 27
<b>13</b> MENU	Menu on/off button	14
<b>14</b> <b>PROGR</b> +/-	Programme buttons Teletext: Page up/page down buttons	12, 13

Step 1

Connecting the Aerial

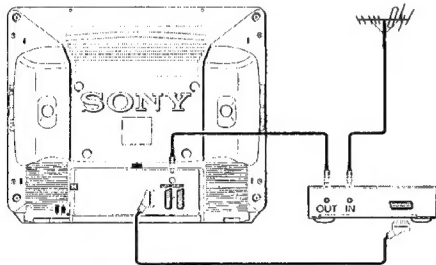
(If you connect a VCR, skip to step 2)

Insert the aerial plug tightly into the aerial socket **1**. Use a good-quality aerial cable (not supplied), corresponding to the relevant regulations.

Step 2

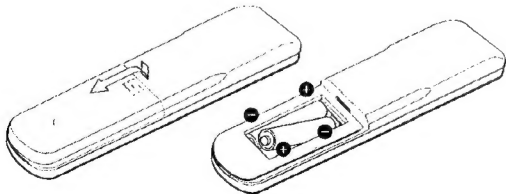
Connecting a VCR

We recommend that you tune in the VCR signal to programme number "0". For details, see "Presetting Channels Manually" on page 16. See "Connecting Optional Equipment" on page 29 for more information.



Step 3

Inserting the Batteries Into the Remote Commander



Respect your environment! Dispose of used batteries in an environmentally friendly way.

Step 4

Presetting Channels Automatically

With this function, the TV can automatically search and store up to 100 different channel numbers.

If you prefer manual presetting, refer to "Presetting Channels Manually" on page 16.

- 1 Plug into mains.  
Press the power switch **1** on the TV set.

- 2 Press and hold the button **1** on the TV set until the automatic menu is displayed and the search starts.

After all available channels are stored, the normal TV picture is shown.

Note: Channels are automatically stored as follows;

KV-25X1U/29X1U	KV-25X1L/29X1L
Programme 1 BBC1	Programme 1 RTE1
Programme 2 BBC2	Programme 2 RTE2
Programme 3 ITV	Programme 3 BBC1
Programme 4 CH4 or S4C	Programme 4 BBC2
	Programme 5 ITV
	Programme 6 CH4 or S4C



## TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the remote commander (numbers in circles). All basic functions are also available on the TV set (letters in boxes). Open the flap at the front of the Instruction Manual to see the illustrations of the Remote Commander and the TV set.

### TV Operation

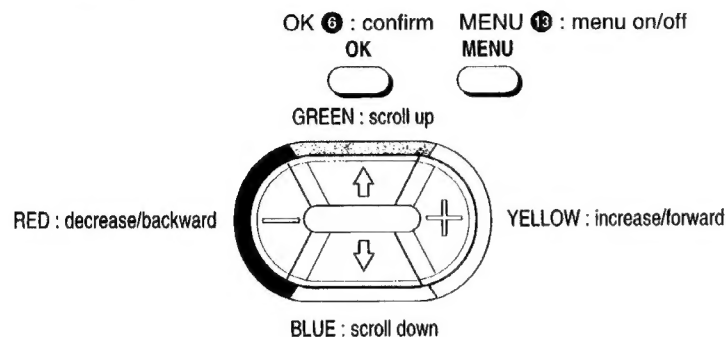
To	Press
Switch on	① <b>I</b> on TV
Switch off temporarily	⏻ ⑩ TV is now in standby mode and ⏻ <b>H</b> indicator on TV lights up.
Switch on from standby mode	□ ③, PROGR +/- ⑭ <b>G</b> or any number button ④.
Switch off completely	① <b>I</b> on TV To save energy, switch off your TV completely when TV is not in use.
Select programmes	PROGR +/- ⑭ <b>G</b> or number buttons ④ For double digit number, press -/- ⑤ then the number e.g. For 23, press -/- ⑤ then 2 and 3.
Display on screen indications	ⓘ ⑫. Press again to make the indications disappear.
Adjust the volume	△ + or - ⑨ <b>F</b>
Mute the sound	⊗ ①. Press again to restore the sound.
View programmes in 16:9 mode	⌘ ⑦. Press again to return to 4:3 mode.

### TV Operation (continued)

To	Press
View video input picture (see page 30 for detailed information)	↺ ⑪ <b>E</b> repeatedly until the desired video input appears. Press □ ③ to restore the TV picture.
View teletext (see page 27 for detailed information)	
Switch on	☰ ②
Select a page	three number buttons ④ or ⏮ ⑭ (for next page) or ⏭ ⑭ (for previous page).
Use fastext	Blue, Green, Red or Yellow ⑧.
Switch off	□ ③

## Adjusting and Setting the TV Using the Menu

You can adjust and set various functions on the TV using the following remote commander buttons:



## Choosing the Menu Language

This function enables you to change the language of the menu screens.

- 1 Press power switch ① ① on the TV. If the standby indicator ① ① on the TV is lit, press ① ④ or a number button ① ④ on the Remote Commander.

- 2 Press the MENU button ⑬ on the remote commander.

LANGUAGE

- ENGLISH
- DEUTSCH
- FRANÇAIS
- ITALIANO
- NEDERLANDS
- POLSKI
- ČESKY
- MAGYAR

- 3 Press blue or green ⑥ to select the language you want then press yellow ⑧.

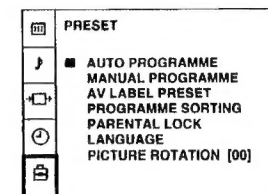
- 4 Press the MENU button ⑬ to restore the normal TV picture.

## Presetting Channels Automatically

You may have already preset the channels automatically by using the method shown on page 11. You can also preset channels automatically by using the remote commander as follows:

- 1 Press the MENU button ⑬.

- 2 Press blue or green ⑥ to select the symbol ① ② on the menu screen then press yellow ⑧.



- 3 Press blue or green ⑥ to select 'AUTO PROGRAMME'.

- 4 Press and hold yellow ⑧ until the automatic menu is displayed and the search starts.

After all available channels have been preset, the normal TV picture is shown.

AUTO PROGRAMME

PROG SYS CH LABEL


01 B/G C25 -----

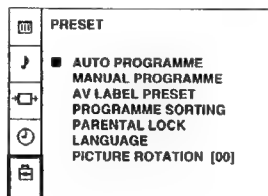
||||| -----

## Presetting Channels Manually

This function enables you to preset channels one by one to different programme numbers. This is also convenient for allocating programme numbers to various video input sources.

**1** Press the MENU button **19**.

**2** Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.



**3** Press blue or green **8** to select 'MANUAL PROGRAMME' then press yellow **8**.

MANUAL PROGRAMME PRESET				
PROG	SYS	CHAN	LABEL	AFT
1	B/G	C 1	-----	ON
2	B/G	C 4	-----	ON
3	B/G	C12	-----	ON
■ 4	B/G	C22	-----	ON
5	B/G	C33	-----	ON
6	B/G	C41	-----	ON
7	B/G	C17	-----	ON
8	B/G	C32	-----	ON

**4** Press blue or green **8** to select on which programme number you want to preset a channel then press yellow **8**.

**5** Press blue or green **8** to select the TV broadcast system 'T' or a video input source (AV1, AV2 ...) then press yellow **8**.

**6** (This step 6 is only for KV-25X1L/29X1L)

Press blue or green **8** to select 'C' (for terrestrial channels) or 'S' (for cable channels) then press yellow **8**.

**7** Select the first number digit of 'CHAN' then the second number digit of 'CHAN' with the number buttons **4** on the remote commander  
or  
Press blue or green **8** to search for the next available channel number.

**8** If you want to store the channel number, go to step 9. If not, select a new channel number using the number buttons **4** on the remote commander or press blue or green **8** to resume the search.

**9** Press OK **6**.





**10** Repeat steps 4 to 9 to preset other channels.

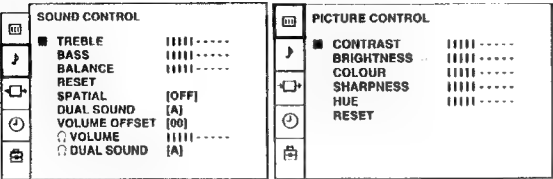
**11** Press the MENU button **19** to restore the normal TV picture.

# Adjusting the Picture and Sound



Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste.

1 Press the MENU button .

2 Press blue or green  to select  for picture control or  for sound control then press yellow .



3 Press blue or green  to select the desired item then press yellow .

4 Press red or yellow  to alter the item then press OK .

For the effect of each control, see the following tables.

5 Repeat steps 3 and 4 to adjust the other items.



6 Press the MENU button  to restore the normal TV picture.

## PICTURE CONTROL Effect

Contrast	Lower — — Higher
Brightness	Darker — — Brighter
Colour	Less — — More
Sharpness	Softer — — Sharper
Hue	Greenish — — Reddish (NTSC signals only)
Reset	Resets picture to the factory preset levels.


## Adjusting the Picture and Sound (continued)

### SOUND CONTROL Effect

Treble	Less — — More
Bass	Less — — More
Balance	Left — — Right
Reset	Resets sound to the factory preset levels.
Spatial	Acoustic sound effect.
Dual Sound	A: Left channel —> B: Right channel —> stereo —> mono
Volume Offset	Presets the volume level for individual programmes. -12 — 0 — +12
 Volume	Adjusts the headphone volume.
 Dual Sound	Presets the headphone channels. A: Left channel —> B: Right channel —> stereo —> mono

## Manual Fine-Tuning


Normally, the automatic fine-tuning (AFT) function is operating. If the picture is distorted however, you can manually fine-tune the TV to obtain a better picture reception.

- 1 Press the MENU button **19**.
- 2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.
- 3 Press blue or green **8** to select 'MANUAL PROGRAMME' then press yellow **8**.
 

MANUAL PROGRAMME PRESET				
PROG	SYS	CHAN	LABEL	AFT
1	B/G	C 1	----	ON
2	B/G	C 4	----	ON
3	B/G	C12	----	ON
■ 4	B/G	C22	----	ON
5	B/G	C33	----	ON
6	B/G	C41	----	ON
7	B/G	C17	----	ON
8	B/G	C32	----	ON
- 4 Press blue or green **8** to select the programme number which corresponds to the channel you want to manually fine-tune.
- 5 Press yellow **8** repeatedly until the AFT position changes colour.
- 6 Press blue or green **8** to change the frequency of the channel from -15 to +15.
- 7 Press OK **6**.
- 8 Repeat steps 4 to 7 to fine-tune other channels.
- 9 Press the MENU button **19** to restore the normal TV picture.

## Sorting Programme Positions

This function enables you to move channels to different programme numbers.

- 1 Press the MENU button **19**.
- 2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.
- 3 Press blue or green **8** to select 'PROGRAMME SORTING' then press yellow **8**.
 


PRESET	
■	AUTO PROGRAMME
■	MANUAL PROGRAMME
■	AV LABEL PRESET
■	PROGRAMME SORTING
■	PARENTAL LOCK
■	LANGUAGE
■	PICTURE ROTATION [00]
- 4 Press blue or green **8** to select the channel you want to move to another programme number then press yellow **8**.
 

PROGRAMME SORTING			
PROG	SYS	CHAN	LABEL
■ 1	B/G	C23	BBC - 1
2	B/G	C26	RTL --
3	B/G	C29	VHS - 1
4	B/G	C31	ZDF --
5	B/G	C44	ITV --
6	B/G	C14	SKY --
7	B/G	C15	SAT - 1
8	B/G	C16	BBC - 2
- 5 Press blue or green **8** to select the programme number to which you want to move the channel selected in step 4 then press yellow **8**.
- 6 Repeat steps 4 to 5 if you wish to move other channels to different programme numbers.
- 7 Press the MENU button **19** to restore the normal TV picture.

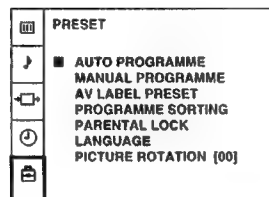
## Using Parental Lock

This function enables you to prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

**1** Press the MENU button **13**.

**2** Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.

**3** Press blue or green **8** to select 'PARENTAL LOCK' then press yellow **8**.



**4** Press blue or green **8** to select the channel you want to block then press yellow **8**.  
The symbol appears before the programme number to indicate that this channel is now blocked.

PARENTAL LOCK			
PROG	SYS	CHAN	LABEL
<b>■</b> 1	B/G	C23	BBC - 1
2	B/G	C26	RTL - -
3	B/G	C29	VHS - 1
4	B/G	C31	ZDF - -
5	B/G	C44	ITV - -
6	B/G	C14	SKY - -
7	B/G	C15	SAT - 1
8	B/G	C16	BBC - 2

**5** Repeat step 4 if you wish to block other channels.


**6** Press the MENU button **13** to restore the normal TV picture.

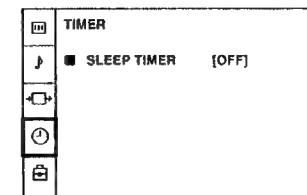
**Note:** To unblock, press yellow **8** after selecting the channel to unblock in the 'PARENTAL LOCK' menu.

## Using the Sleep Timer

This function enables you to select a time period after which the TV automatically switches into standby mode.

**1** Press the MENU button **13**.

**2** Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.



**3** Press yellow **8**.

**4** Press red or yellow **8** to set time delay and press OK **6**.

OFF 0:30 1:00 1:30 ..... 3:30 4:00


One minute before the TV switches into standby mode, a message is displayed on the screen.

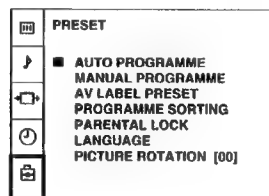
**5** Press the MENU button **13** to restore the normal TV picture.

## Adjusting the Picture Rotation

If, due to the earth magnetism, the picture slants, you can use the function 'Picture Rotation' to readjust the picture.

1 Press the MENU button **15**.

2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **9**.



3 Press blue or green **8** to select 'PICTURE ROTATION' then press yellow **9**.


4 Press red or yellow **8** to adjust the picture rotation then press OK **6**. The adjusting range is -5 to +5.

5 Press the MENU button **15** to restore the normal TV picture.

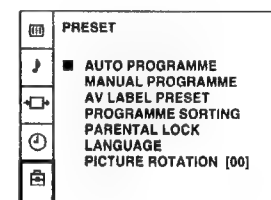
## Skipping Programme Positions

This function enables you to skip unused channels when selecting programme numbers with the PROGR+/- buttons. However, you can still watch the skipped channel(s) by using the number buttons.

1 Press the MENU button **15**.

2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **9**.

3 Press blue or green **8** to select 'MANUAL PROGRAMME' then press yellow **9**.



4 Press blue or green **8** to select the channel you want to skip then press yellow **9**.

5 Press blue or green **8** until '---' appears in the 'SYS' position.

MANUAL PROGRAMME PRESET					
PROG	SYS	CHAN	LABEL	AFT	
1	B/G	C 1	----	ON	
2	B/G	C 4	----	ON	
3	B/G	C12	----	ON	
4	---	C22	----	ON	
5	B/G	C33	----	ON	
6	B/G	C41	----	ON	
7	B/G	C17	----	ON	
8	B/G	C32	----	ON	

6 Press OK **6**.


7 Repeat steps 4 to 6 to skip other channels.

8 Press the MENU button **15** to restore the normal TV picture.

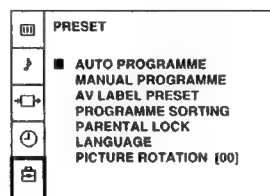
## Captioning a Station Name

Names for channels are usually automatically taken from teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers).

1 Press the MENU button **13**.

2 Press blue or green **8** to select the symbol  on the menu screen then press yellow **8**.

3 Press blue or green **8** to select 'MANUAL PROGRAMME' then press yellow **8**.



4 Press blue or green **8** to select the channel you wish to caption then press yellow **8** repeatedly until the first element of the 'LABEL' position is highlighted.

5 Press **8** blue or green to select a letter or number and press yellow **8** (select '-' for a blank). Select other characters in the same way.

MANUAL PROGRAMME PRESET					
PROG	SYS	CHAN	LABEL	AFT	
1	B/G	C 1	----	ON	
2	B/G	C 4	----	ON	
3	B/G	C12	----	ON	
4	B/G	C22	-A----	ON	
5	B/G	C33	-A----	ON	
6	B/G	C41	----	ON	
7	B/G	C17	----	ON	
8	B/G	C32	----	ON	

6 After selecting all the characters, press OK **6**.

7 Repeat steps 4 to 6 to caption names for other channels.

8 Press the MENU button **13** to restore the normal TV screen.


## Teletext

Most TV channels broadcast information via teletext. The index page of the broadcaster (usually page 100) gives you information on how to use the service.


Make sure you use a TV channel with a strong signal, otherwise teletext errors may occur.

## Switching Teletext On and Off






1 Select the channel which carries the teletext service you wish to view.

2 Press  **2** to display teletext.  
If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

3 Input three digits for the page number using the number buttons **4**.  
The page counter searches for the page and after some seconds the page is displayed.

4 Press  **8** to return to the normal TV picture.

## Using Other Teletext Functions

To	Press
Access the next or preceding teletext page	 <b>14</b> for the next page or  <b>14</b> for the preceding page
Mix the mode	 <b>2</b> when in teletext mode. Now the teletext page is superimposed on the TV programme. Press again to return to the normal teletext display.
Freeze a teletext subpage	 <b>11</b> . Press once again to cancel.
Reveal hidden information (eg: answers to a quiz)	 <b>12</b> . Press once again to cancel.



## Favourite page system

You can store up to four of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

### Storing pages

- 1 Use the number buttons **4** to select the page you would like to store.
- 2 Press **↔ 7** twice.  
The colour prompts at the bottom of the screen flash.
- 3 Press red, green, blue or yellow to store the selected page.  
The page is now stored on this colour.

Repeat steps 1 to 3 for the other 3 pages.

### Displaying the Favourite Pages

- 1 Press **↔ 7**.
- 2 Press blue, green, red or yellow to select the desired page.

Make sure you press **↔ 7**, otherwise the normal Fastext facility operates.

## Using Fastext

(only available, if the TV station broadcasts Fastext signals)

With Fastext you can access pages with one key stroke. When Fastext is broadcast, a colour-coded menu appears at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue colours on the Remote Commander.

Press the Remote Commander colour button that corresponds to the colour-coded menu. The selected page is displayed after some seconds.

## Optional Equipment

## Connecting Optional Equipment

There is a wide range of optional equipment you can connect to your TV. Refer to the illustrations on the front flap page of this manual.

Symbol	Acceptable input signals	Available output signals
 	Normal audio/video and S video	No output
	Normal audio/video and RGB	Audio/video from TV tuner
	Normal audio/video and S video	Audio/video from selected source

### About S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Separating the two signals prevents interference and thus improves the picture quality.

### Notes on connections:

If the picture or sound is distorted, move the VCR away from the TV.

When connecting a monaural VCR, connect only the white jack to both the TV and VCR.

## Selecting Input and Output Signals

This section explains how to select the output signal from 2 / 2 and how to select and view the input. You can use direct access buttons 1 E to select the input or the menu system to select input and output.

### Selecting With Direct Access Buttons

Press 1 E repeatedly.

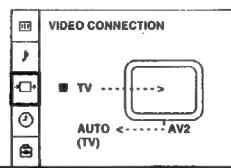
Press 3 to restore the normal TV picture.

Symbol on the screen	Input Signal
1	Audio/video through Euro AV connector  K
2	RGB through Euro AV connector  K
2	Audio/video through Euro AV connector  L
2	S video through Euro AV connector  L
3	Audio/video through the phono jacks  C
3	S video through the phono jacks  B

### Selecting With the Video Connection Menu

1 Press the MENU button 13.

2 Press blue or green 8 to select for "VIDEO CONNECTION" then press yellow 8.



3 Press blue or green to select input or output then press yellow 8.

4 Press blue or green repeatedly to select the desired input or output source then press OK 6.

5 Press the MENU button 13 to restore the normal TV picture.

**Note:** If you select 'AUTO' for output, the output source automatically becomes the same as the desired input source.

## Using AV Label Preset

This function enables you to label the input sources using up to five characters (letters or numbers).

1 Press the MENU button 13.

2 Press blue or green 8 to select the symbol on the screen then press yellow 8.

3 Press blue or green 8 to select 'AV LABEL PRESET' then press yellow 8.

AV LABEL PRESET	
INPUT	LABEL
■ AV1	.....
RGB	.....
AV2	.....
YC2	.....
AV3	.....
YC3	.....

4 Press blue or green 8 to select the desired input source then press yellow 8.

5 Press blue or green 8 to select a letter or number then press yellow 8 (select '-' for a blank).  
Select other characters in the same way.








6 After selecting all the characters, press OK 6.

7 Repeat steps 4 to 6 to label other input sources.

8 Press the MENU button 13 to restore the normal TV screen.

## Troubleshooting

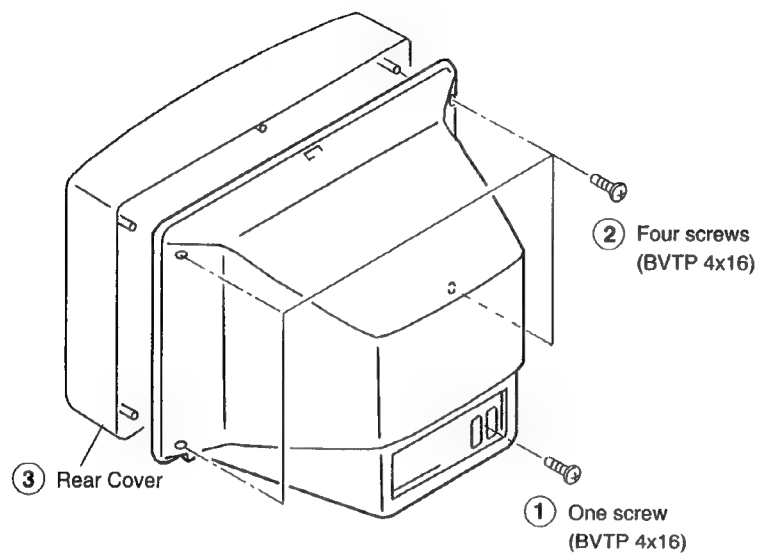
Here are some simple solutions to the problems which affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none"> <li>• Plug the TV in.</li> <li>• Press ① <b>I</b> on the TV. (If  indicator <b>H</b> is on, press  <b>3</b> or a programme number <b>4</b> on the Remote Commander.)</li> <li>• Check the aerial connection.</li> <li>• Check if the selected video source is on.</li> <li>• Turn the TV off for 3 or 4 seconds then turn it on again using ① <b>I</b>.</li> </ul>
Poor or no picture (screen is dark), but good sound	<ul style="list-style-type: none"> <li>• Press MENU <b>13</b> to enter the 'PICTURE CONTROL' menu and adjust 'Contrast', 'Brightness' and 'Colour'.</li> </ul>
Poor picture quality when watching an RGB video source.	<ul style="list-style-type: none"> <li>• Press  <b>11</b> <b>E</b> repeatedly to select .</li> </ul>
Good picture but no sound	<ul style="list-style-type: none"> <li>• Press  + <b>9</b> <b>F</b>.</li> <li>• If  is displayed on the screen, press  <b>1</b>.</li> </ul>
No colour for colour programmes	<ul style="list-style-type: none"> <li>• Press MENU <b>13</b> to enter the 'PICTURE CONTROL' menu, select 'Reset' then press OK <b>6</b>.</li> </ul>
Remote Commander does not function.	<ul style="list-style-type: none"> <li>• Replace the batteries.</li> </ul>

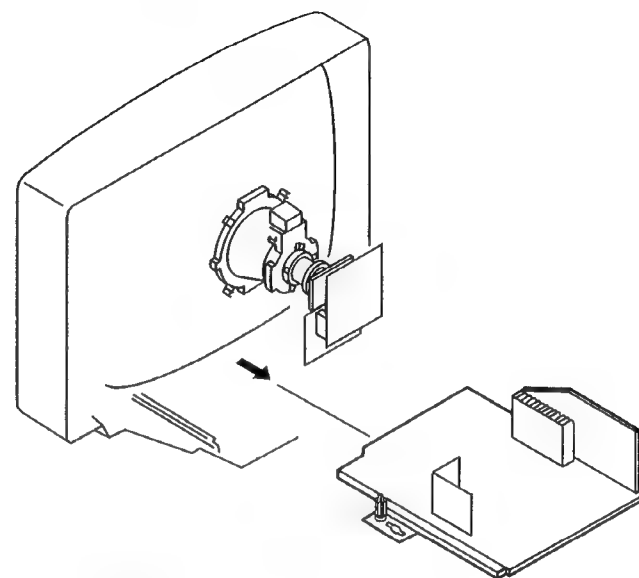
If you continue to have problems, have your TV serviced by qualified personnel.  
Never open the casing yourself.

## SECTION 2 DISASSEMBLY

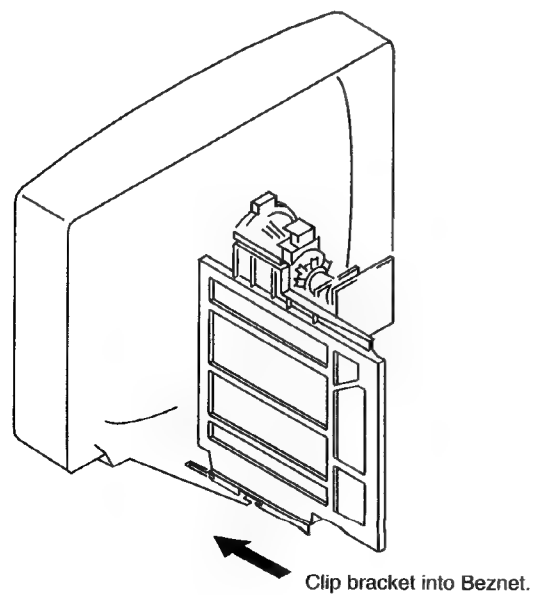
### 2-1. REAR COVER REMOVAL



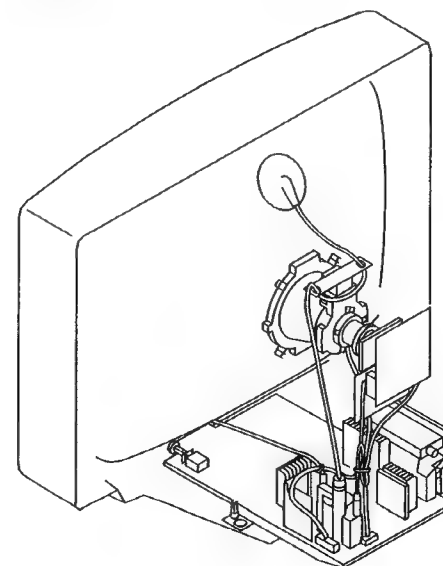
### 2-2. CHASSIS ASSY REMOVAL



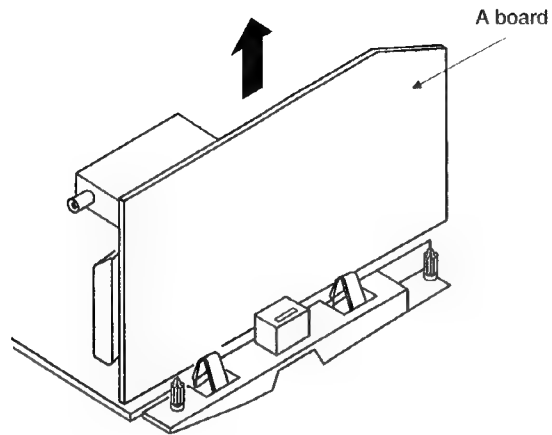
### 2-3. SERVICE POSITION



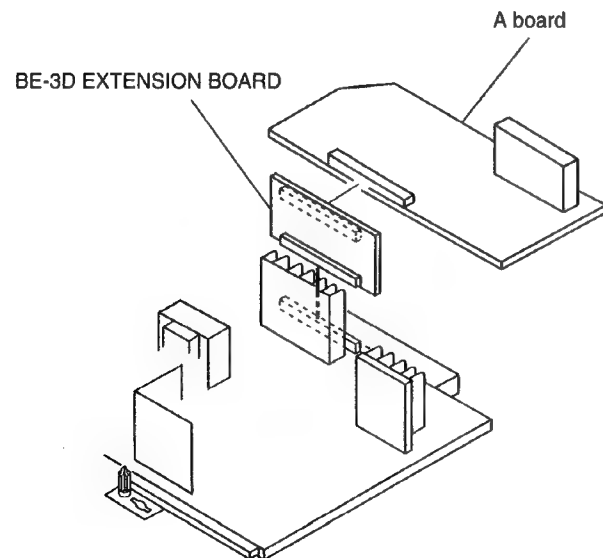
### 2-4. WIRE DRESSING



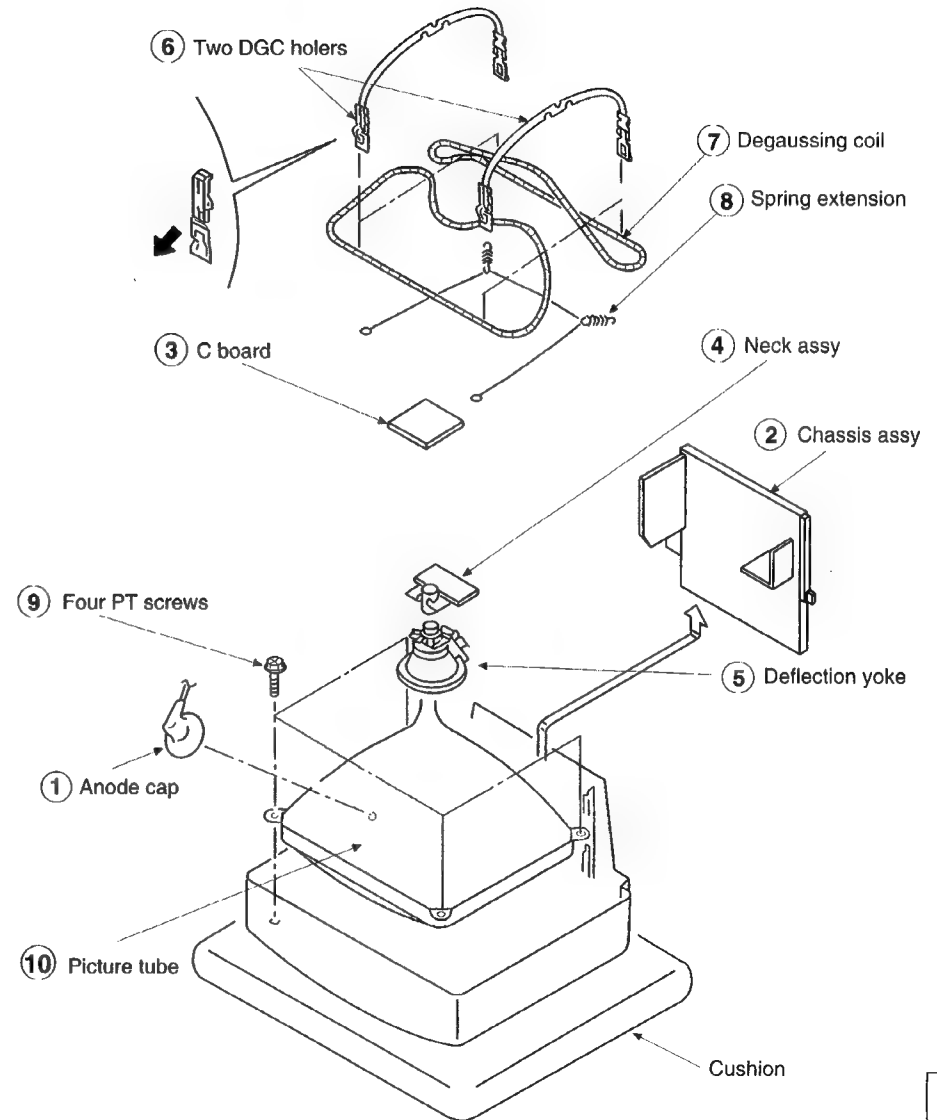
## 2-5. A BOARD REMOVAL



## 2-6. EXTENSION BOARD



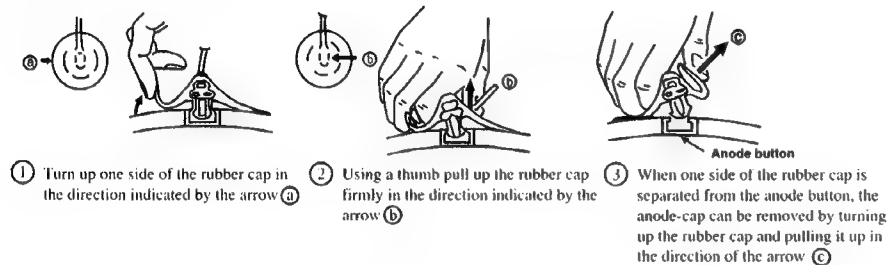
## 2-7. PICTURE TUBE REMOVAL



## • REMOVAL OF ANODE-CAP

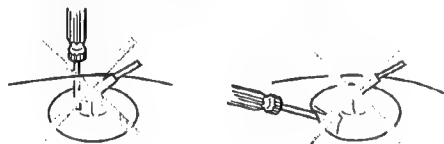
**Note:** Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

### • REMOVING PROCEDURES.



### • HOW TO HANDLE AN ANODE-CAP

- ① Don't damage the surface of anode-cap with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps !  
A metal fitting called as shatter-hook terminal is built into the rubber.
- ③ Don't turn the foot of rubber over hardly !  
The shatter-hook terminal will stick out or damage the rubber.



## SECTION 3

### SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

● Contrast ..... 80% (or remote control normal)  
 ☆ Brightness ..... 50%

- Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

**Note:** Testing equipment required.

1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

#### Preparation:

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

#### 3-1. BEAM LANDING

1. Input the white signal with the pattern generator.  
 CONTRAST } normal  
 BRIGHTNESS }
2. Position neck assy as shown in Fig.3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke forward and adjust with the purity control so that the red is at the centre and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
5. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

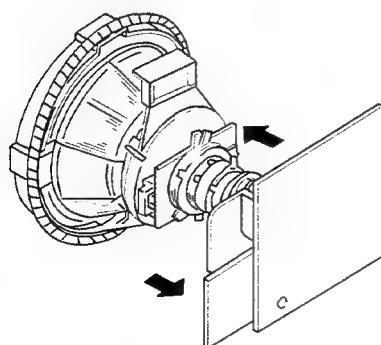


Fig. 3-1

Fig. 3-2

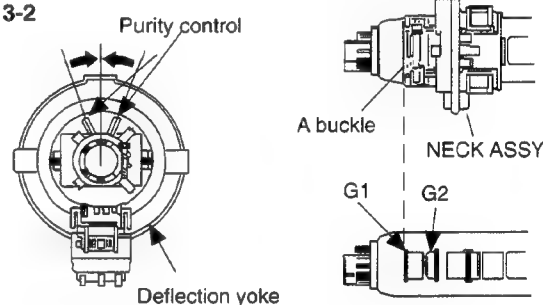


Fig. 3-3

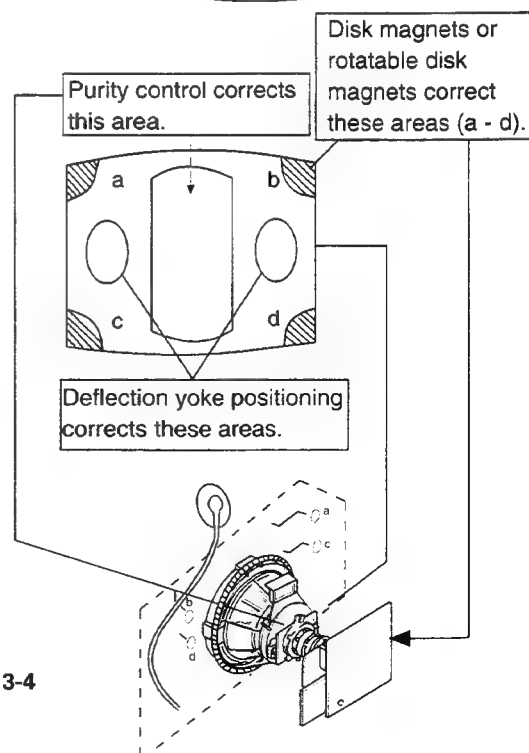
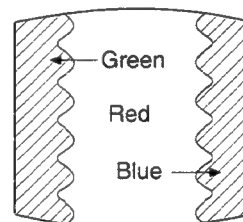


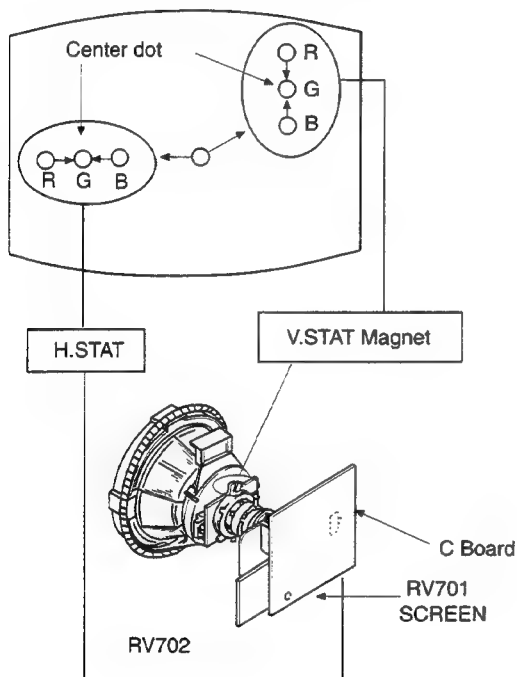
Fig. 3-4

### 3-2. CONVERGENCE

#### Preparation:

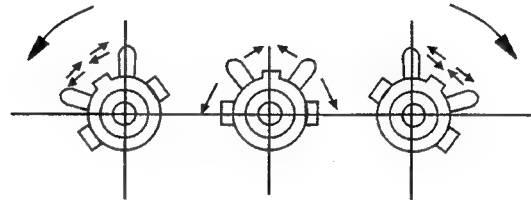
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

#### (1) Horizontal and vertical static convergence

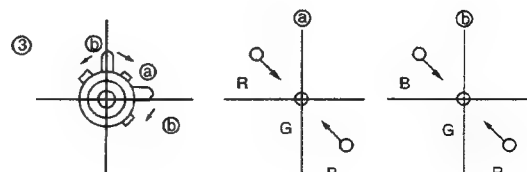
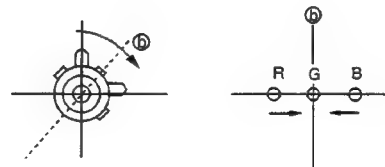
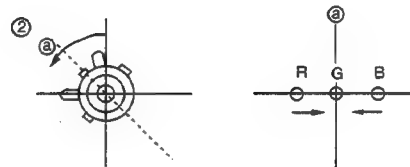
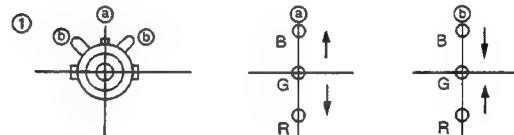


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the centre of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the centre of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the centre of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.  
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

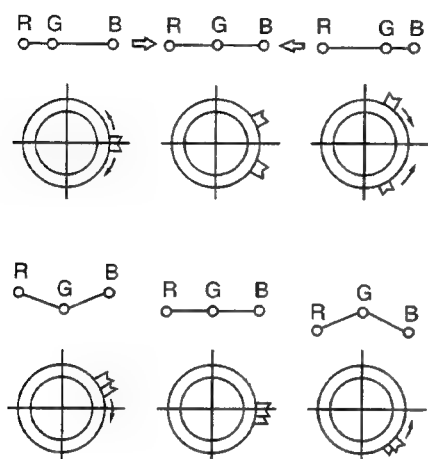


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.

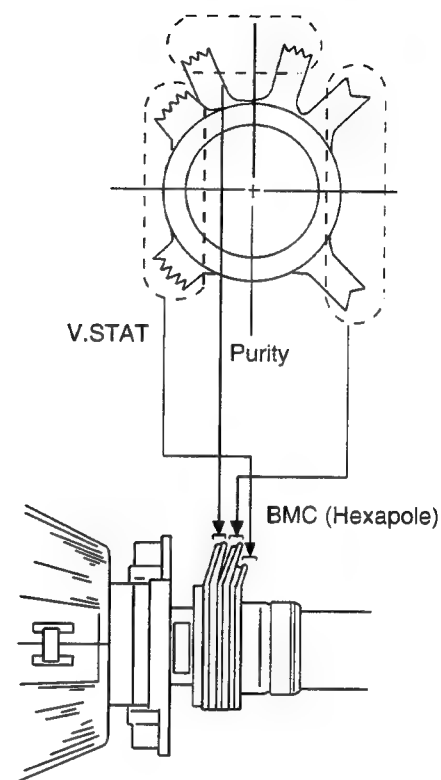




• Operation of BMC (Hexapole) Magnet



- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.  
Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the centre of the screen (by moving the dots in the horizontal direction).

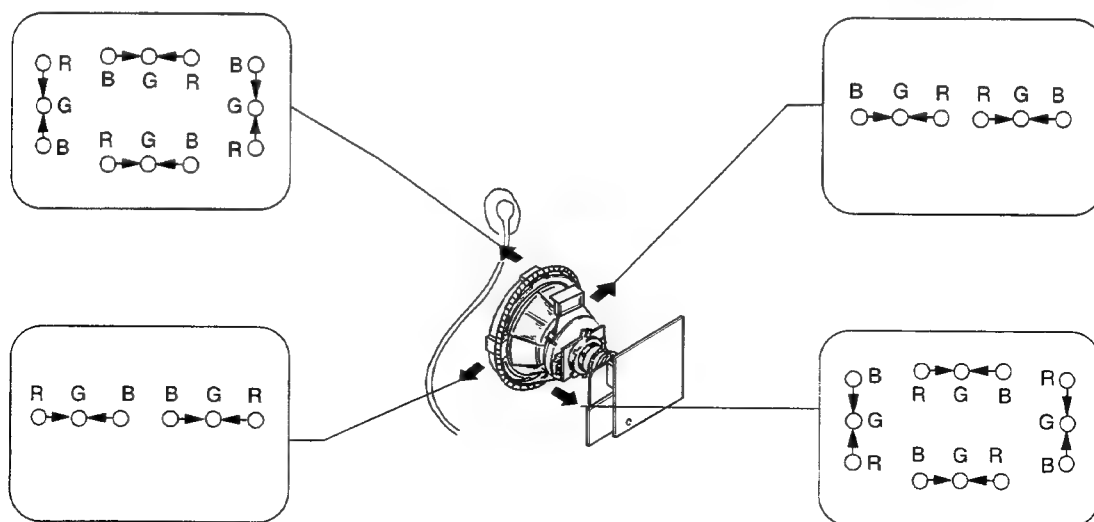


(2) Dynamic convergence adjustment.

**Preparation:**

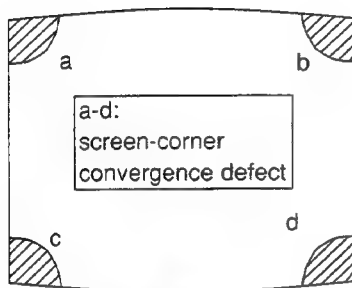
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.
- Slightly loosen the deflection yoke screws.

- Remove the deflection yoke spacer.
- Move the deflection yoke as shown in the figure below and optimize the convergence.
- Tighten the deflection yoke screws.
- Re-install the deflection yoke spacer.

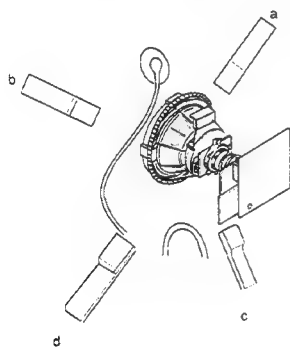


**(3) Screen corner convergence.**

If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.



Install the permalloy assembly  
for the section with fault



Permalloy

**3-3. WHITE BALANCE****G2 Setting**

1. Switch the set into AV mode (apply no signal to the AV connectors).
2. Connect a Volt Meter to Test Point 1 on the A board.
3. Adjust RV01 to obtain a voltage of  $3.0V \pm 0.3V$ .

**White balance adjustment**

1. Input an all white signal from the pattern generator.
2. Enter into the service mode.
3. Enter into Picture Adjustment service menu.
4. Select sub-contrast and adjust to 7.
5. Select the Green Drive and adjust so that the white balance becomes optimum.
6. Select the Blue Drive and adjust so that the white balance becomes optimum.
7. Press the TV button to return to TV operation.

**PICTURE ADJUSTMENT**

AFC mode	1
REF position	2
SCP BGR	1
SCP BGF	1
Trap Fo	0
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Sub hue	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	3

## SECTION 4

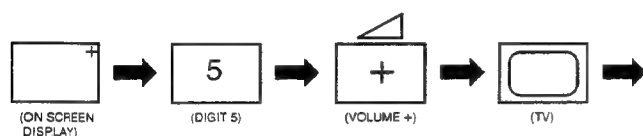
### CIRCUIT ADJUSTMENTS

#### 4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-839.

##### HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.



"TT-- " will appear in the top right corner of the screen.  
Other status information will also be displayed.

3. Press MENU on the commander to obtain the following menu on the screen.

##### TEST MENU

> Picture adjustment  
Geometry  
Wide  
MSP  
IC status  
Current TV status

4. Move to the corresponding adjustment using the ↓ button on the commander.
5. Press the + button to enter the selected adjustment.
6. Turn off the power to quit the service mode when adjustments are completed.

##### PICTURE ADJUSTMENT

AFC mode	1
REF position	3
SCP BGR	1
SCP BGF	1
Trap Fo	7
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Sub hue	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	5

##### GEOMETRY ADJUSTMENT

V Size	Adj
V Position	Adj
S Correction	Adj
V Linearity	Adj
H Size	Adj
H Position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	Adj
EHT H	Adj
Corner Pin	Adj

##### WIDE

V Aspect	43
V Scroll	31
Upper V Lin	0
Lower V Lin	0
Left Blanking	1
Right Blanking	11

## MSP

AGC ON/OFF	ON
Constant gain CDB	0
FM prescale FMP	36
Zwei mono-st WHI	36
Zwei st-mono WLO	18
Zwei mono-bi WMH	36
Zwei bi-mono WLO	18
Time zwei WML	41
Fawct limit	10
Fawct soll init FAW	12
Fawer tol	2
Nicam Err Max CCT	10
Nicam Err Min	0
Nicam Prescale NIP	97
Time Nicam	31
Carrier mute CRM	OFF
Audio clock ACO	HIZ
Scart prescale	25
Scart volume	64

## IC STATUS (CXA2000 / CXA2040)

CXA2000

H lock	1
IKR	1
VNG	0
X-RAY	0
Colour system	3
CV1 Sync	1

CXA2040

Sync sep	1
S1 mode pin	01
S2 mode pin	01

TUNER

Tuner status	01101011
--------------	----------

## TV STATUS

Text system	C TEXT/TV TEXT
Dolby	NO/YES
Text language set	WEST/EAST/RUSSIAN
Menu language set	WEST/EAST/RUSSIAN
Destination	B/D/U/K/L/E/A/R
Scart 16:9	OFF/ON
RGB priority	OFF/ON
Ageing	OFF/ON
Size	29/25
Colour trap sw	SECAM/ALL
Velocity mod	ON/OFF
AFT STATUS	WINDOW/HIGH/LOW

## SUB BRIGHTNESS ADJUSTMENT

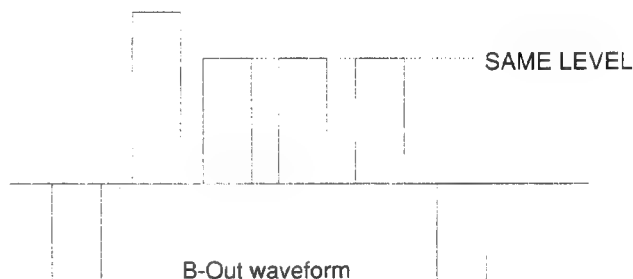
1. Input a Phillips pattern.
2. Set the picture control to minimum.
3. Enter into the Picture Adjustment Service Menu.
4. Adjust the Sub-Brightness data so that there is barely a difference between the 0 IRE and 10 IRE signal.

## SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a black background.
2. Set the picture control to maximum.
3. Connect an oscilloscope to pin 3 of CN301 (A board).
4. Enter into the Picture Adjustment Service Menu.
5. Adjust the Sub-contrast data to obtain a black to white amplitude of 2.50 volts.

## SUB COLOUR ADJUSTMENT

1. Receive a PAL Colour Bar video signal.
2. Connect an oscilloscope to pin 3 of CN301 (A board).
3. Enter into the Picture Adjustment Service Menu.
4. Adjust the sub colour data so that cyan, magenta and blue colour bars are of equal height.



NOTE: The data shown in the TV STATUS table is dependant on destination, screen size and country.

**SYSTEM B/G, D/K, I & L I.F. ADJUSTMENT**

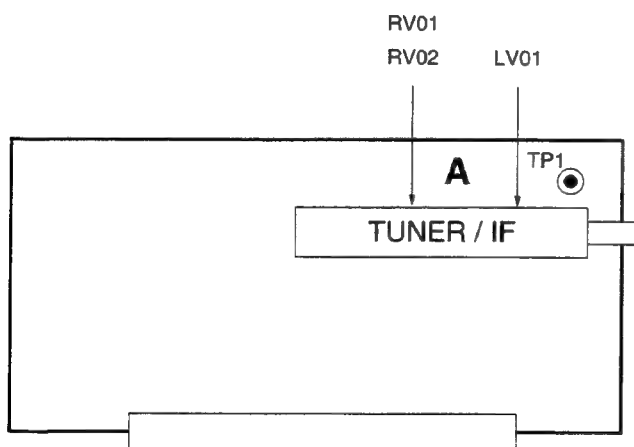
1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
2. Enter into the I.F adjustment service mode (i.e. " TT 59 " ) to fix the I.F frequency to 38.9 MHz.
3. Enter into the service mode and select "Current TVStatus".
4. Adjust the I.F coil (LV01) until the "AFT Status" indicates a " Window " condition.

**SYSTEM L BAND 1 I.F. ADJUSTMENT**

1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
2. Enter into the I.F adjustment service mode (i.e. " TT 59 " ) to fix the I.F frequency to 34.2 MHz.
3. Enter into the service mode and select "Current TVStatus".
4. Adjust the RV02 until the "AFT Status" indicates a " Window " condition.

**TUNER AGC ADJUSTMENT**

1. Receive a signal of 63dBuV / 75 ohm terminated via the tuner socket.
2. Measure the voltage at test point 1 (A board).
3. Adjust RV01 to obtain a voltage of  $3.0V \pm 0.3V$ .



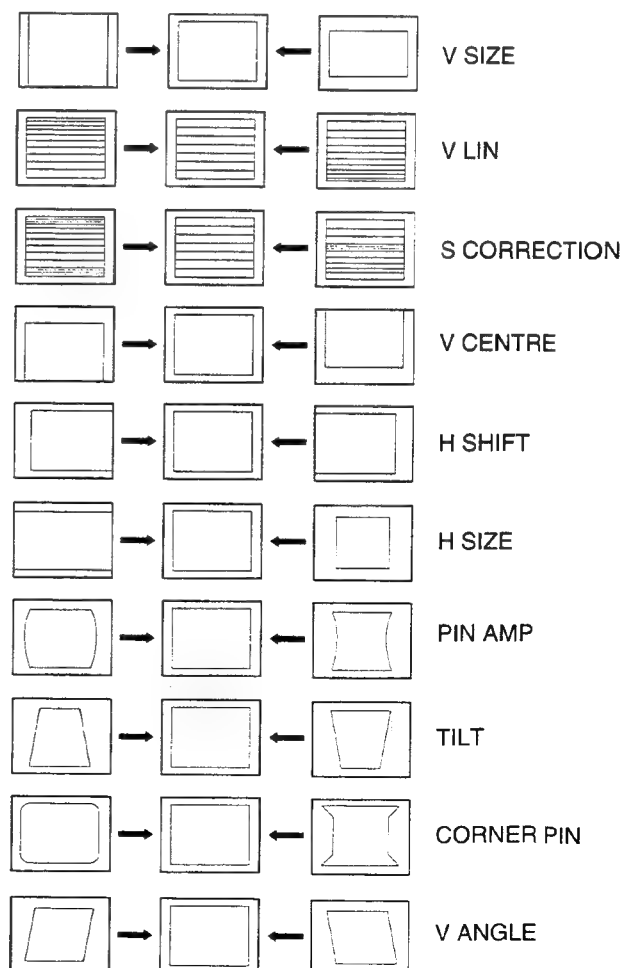
- A Board component side -

**DEFLECTION SYSTEM ADJUSTMENT**

1. Enter into the Geometry Adjustment Service Menu.
2. Select and adjust each item in order to obtain the optimum image.

**GEOMETRY ADJUSTMENT**

V Size	Adj
V Position	Adj
S Correction	Adj
V Linearity	Adj
H Size	Adj
H Position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	Adj
EHT H	Adj
Corner Pin	Adj



## 4-2. TEST MODE 2:

Is available by pressing Test button twice, OSD " TT " appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0 twice, or switch the TV into stand-by mode.

00	Switch test mode 2 off
01	Picture maximum
02	Picture minimum
03	Volume 30%
04	Set service menu mode
05	Set production menu mode
06	Volume 80%
07	Set ageing condition
08	Set shipping condition
09	Language reset
10	No function
11	Adjustment without OSD
12	Dummy
13	Display TV configuration
14	Forced AV 6:9 mode
15	Reset LPM from ROM data
16	copy LPM to reset memory
17	Preset label for AV sources
18	RGB priority on/off
19	Clear all preset labels
20	No function
21	Sub contrast
22	Sub colour
23	Sub brightness
24	Set destination = U
25	Set destination = D
26	Set destination = B
27	Set destination = K
28	Set destination = L
29	Set destination = E
30	No function
31	Set destination =A
32	Dummy
33	Auto AGC
34	Dummy
35	Manual AGC adjust

36-40	Dummy
41	Re-initialise NVM
42	Production use only
43	Initialise geometry settings
44	Initialise all favourite pages = 100
45	Channel locks = off
46	Dealer commander mode
47	Default MSP settings
48	Restore NVM test byte
49	Delete NVM test byte
50-60	No function
61	Turn on Dolby Pro Logic mode
62	White noise to left speaker
63	White noise to right speaker
64	White noise to centre speaker
65	White noise to rear speaker
66	Set standard stereo mode
67	Set Pro Logic normal mode
68	Set Pro Logic wide mode
69	Set Pro Logic phantom mode
70	No function
71	Picture rotation on/off
72	Dolby register settings
74	No function
75	Reset picture colour balance
76	Reset picture geometry
77	Reset sound settings
78	Reset error codes in the NVM
79-99	No function

### 4-3. BE-3D SELF DIAGNOSTIC SOFTWARE

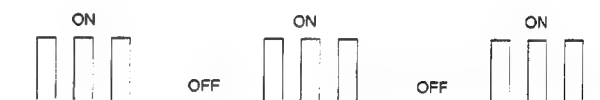
The identification of errors within the BE-3D chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1, non fatal errors are reported with this method.

**Table 1**

ERROR	LED ERROR COUNT
Protection circuit trip < ANY TIME >	02
IIC SCL LOW < POWER UP ONLY >	03
IIC SDA LOW < POWER UP ONLY >	04
IIC SDA & SCL LOW < POWER UP ONLY >	05
Jungle/Chroma controller no acknowledge < POWER UP ONLY >	06
Video Switch no acknowledge < POWER UP ONLY >	07
Tuner no acknowledge	08
MSP no acknowledge	09
NVM no acknowledge	10
M3L TXD LOW < POWER UP ONLY >	11
M3L RXD LOW < POWER UP ONLY >	12
M3L ENABLE LOW < POWER UP ONLY >	13
M3L TXD & RXD LOW < POWER UP ONLY >	14
Compact Text test fail < POWER UP ONLY >	15
AV switch cannot power on reset	16
Cannot initialise jungle	17
NVM acknowledge fail after initialisation	18
Multiple devices with no acknowledge < POWER UP ONLY >	19
Compacttext run-time failure	20
AVSWITCH response failure after power up	21
JUNGLE/CHROMA controller response failure after power up	22
CompactText does not respond	23

Flash Timing Example : e.g. error number 3.

Stby LED



MEMO

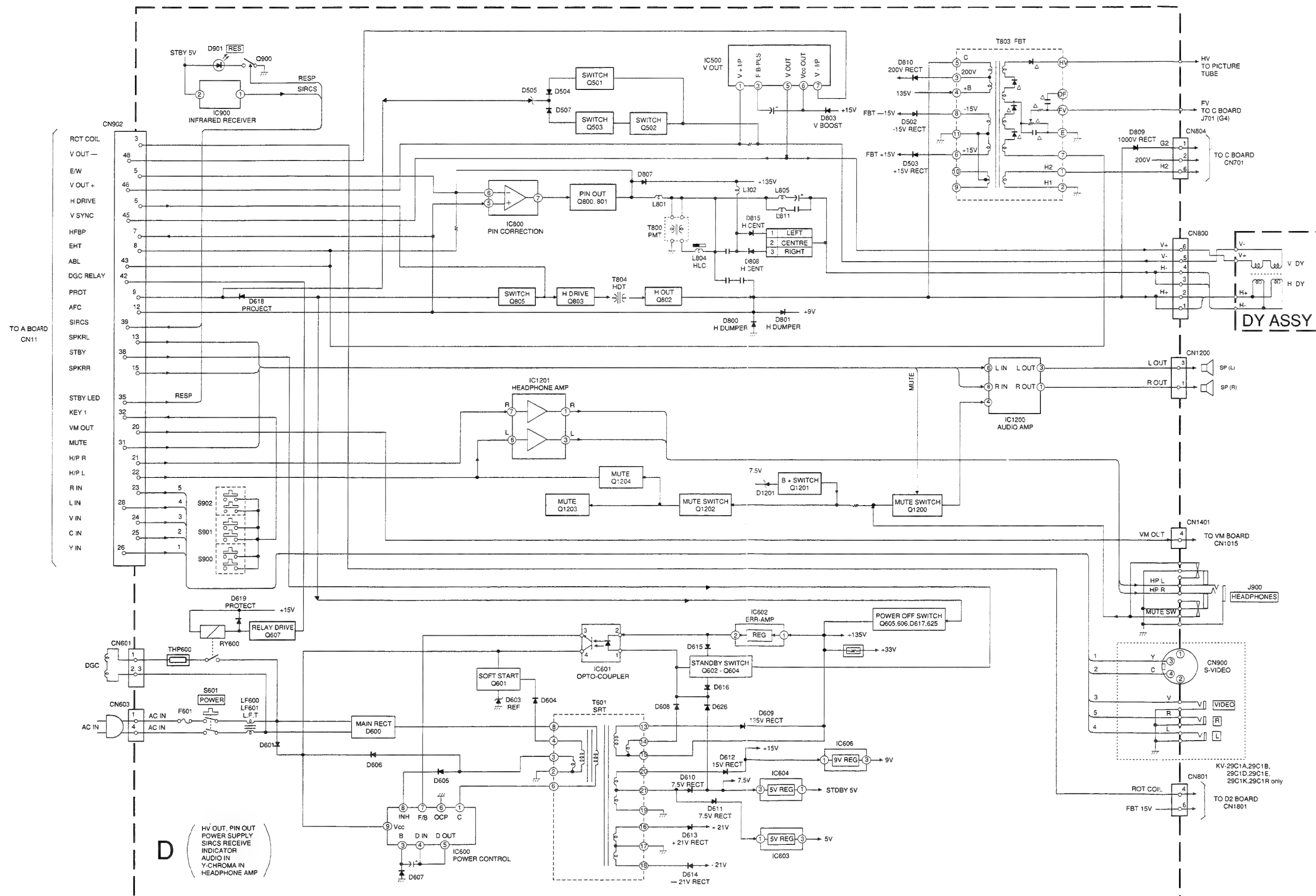
Lined area for writing the memo.



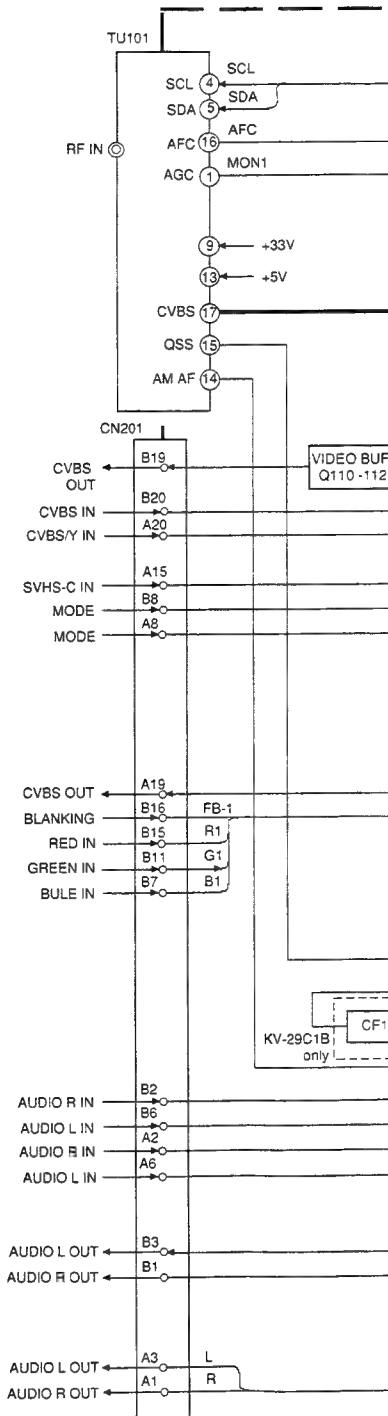
## SECTION 5 DIAGRAMS

KV-29C1

## 5-1. BLOCK DIAGRAM (1)

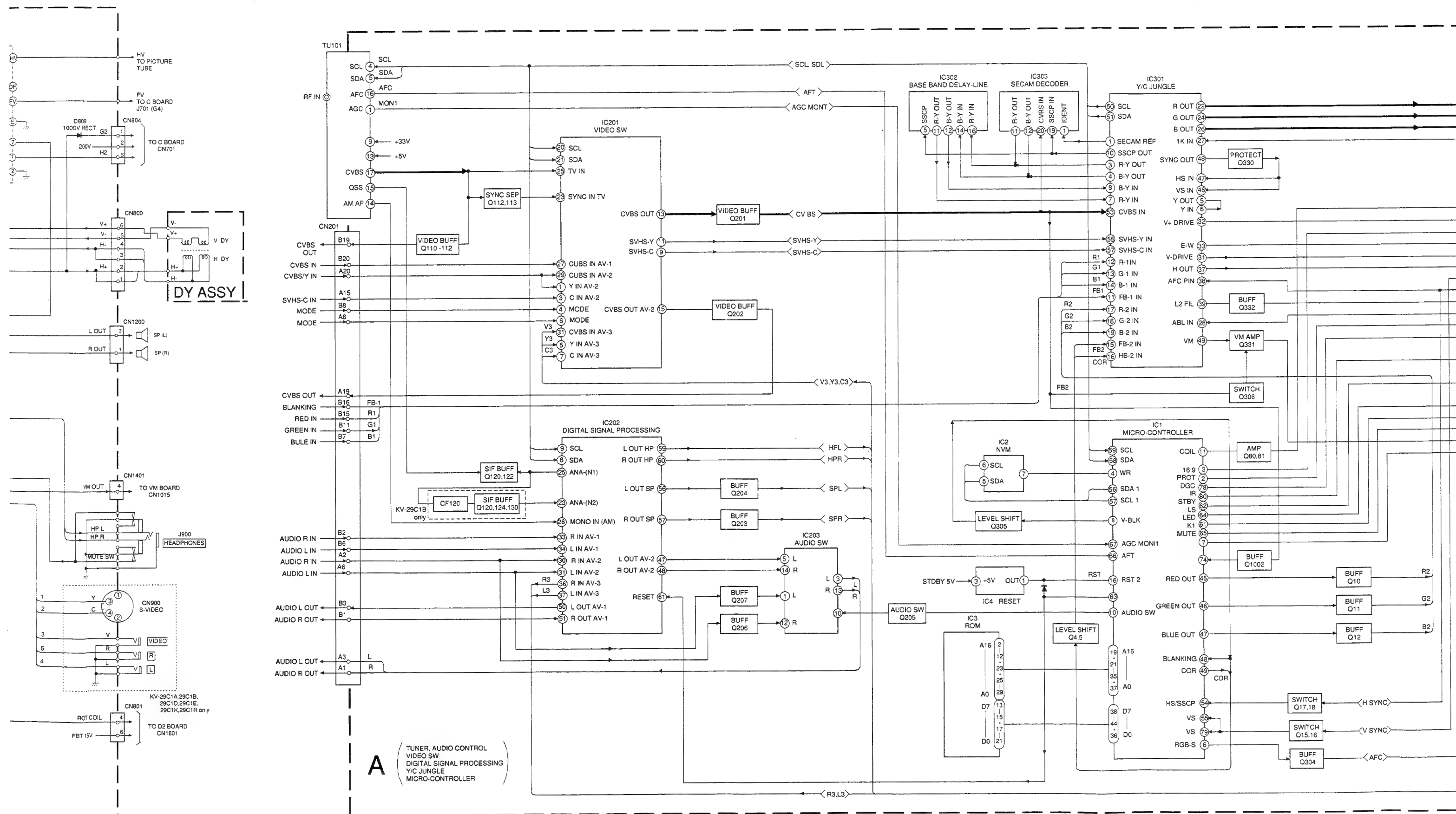


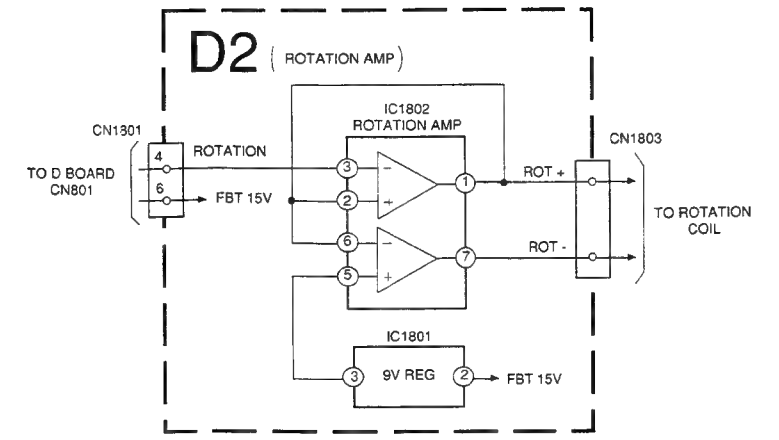
### BLOCK DIAGRAM



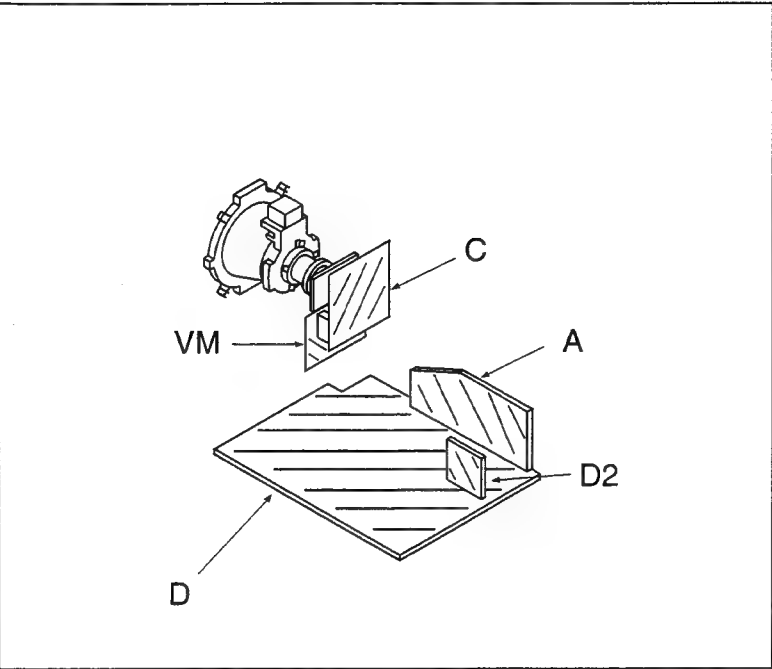
**A** VIDEO SW  
DIGITAL SIGNA  
Y/C JUNGLE  
MICRO-CONTR

## BLOCK DIAGRAM (2)





5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

- Note :
- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytic and tantalums.
  - All resistors are in ohms.
  - k = 1000 , M = 1000K
  - Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm  
Rating electrical power  $\frac{1}{4}$  W

- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- $\perp$  : earth - ground.
- $\pi$  : earth - chassis.
- $\#$  : no mounted.

Note : The components identified by shading and marked are critical for safety. Replace only with the part number specified.

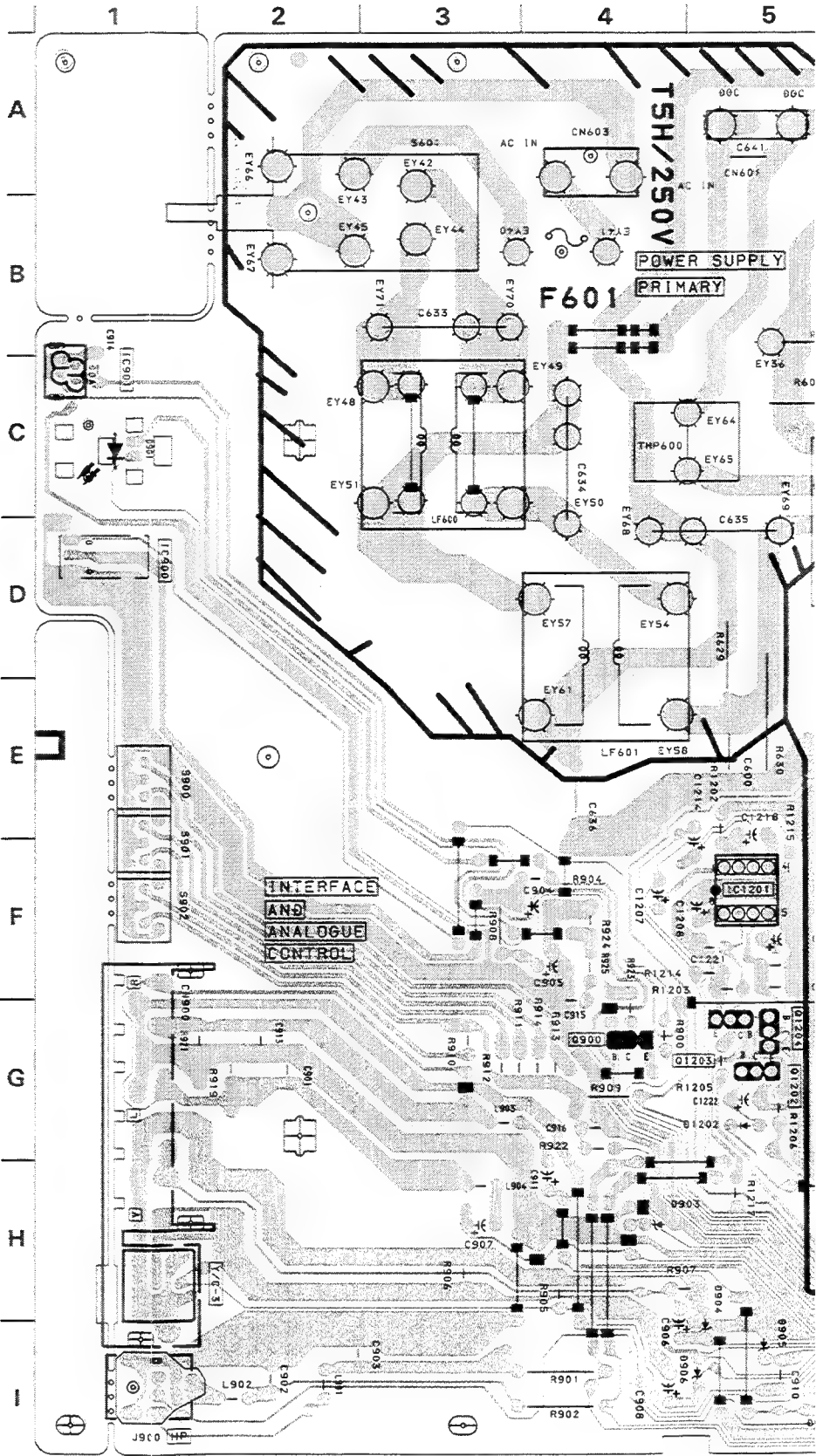
Note : Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Reference information		
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTABLE RESISTOR
	: LF-8L	MICRO INDUCTOR
	: TA	TANTALUM
COIL	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE
CAPACITOR		

- Readings are taken with a colour-bar signal input.
- Readings are taken with 10M $\Omega$  digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
- : B+ bus.
- : signal path. (RF)

**D** [ HV OUT, PIN OUT, POWER SUPPLY, CONTROL SW, AUDIO IN  
Y-CHROMA IN, HEADPHONE IN, SIRCS RECEIVE, INDICAITON ]

D Board







## D BOARD

## IC

IC500  
IC600  
IC601  
IC602  
IC603  
IC604  
IC606  
IC800  
IC900  
IC1200  
IC1201

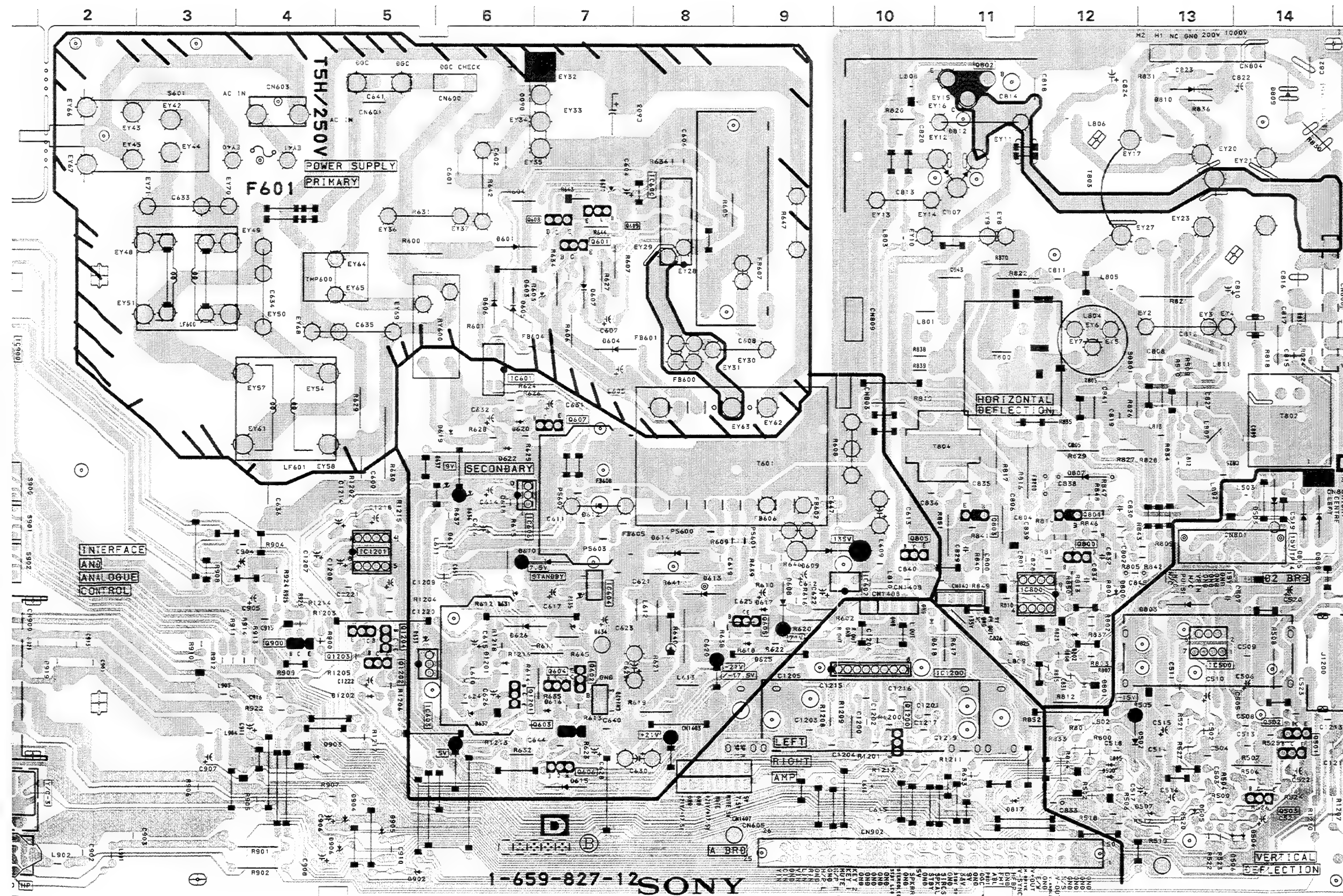
## TRANSIS

Q501  
Q502  
Q503  
Q601  
Q602  
Q603  
Q604  
Q605  
Q606  
Q607  
Q800  
Q801  
Q802  
Q803  
Q805  
Q900  
Q1200  
Q1201  
Q1202  
Q1203  
Q1204

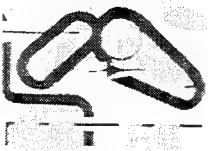
## DIOD

D500  
D502  
D503  
D504  
D505  
D506  
D507

UT, PIN OUT, POWER SUPPLY, CONTROL SW, AUDIO IN  
ROMA IN, HEADPHONE IN, SIRCS RECEIVE, INDICAITON







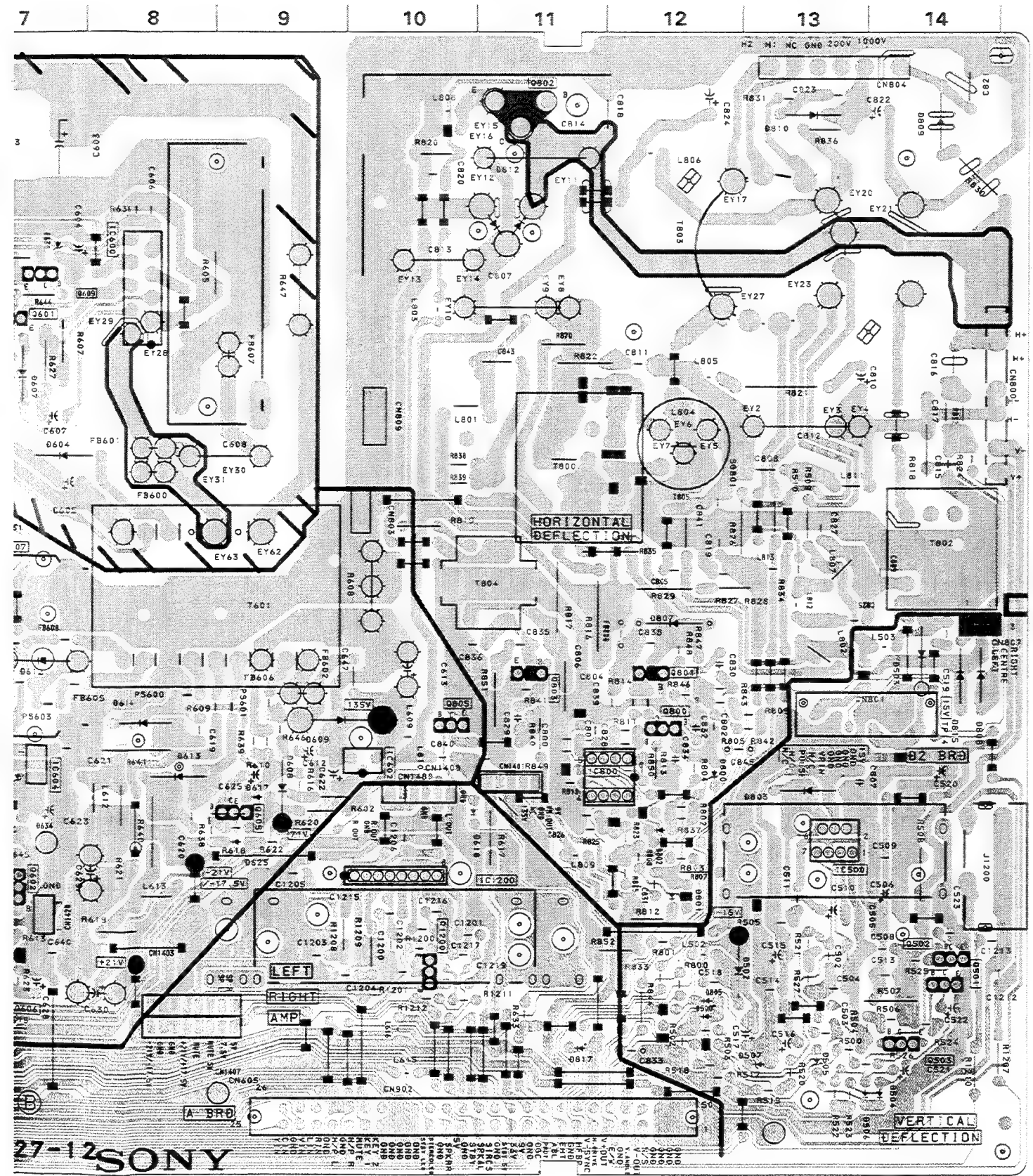
**NOTE:**  
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

D BOARD

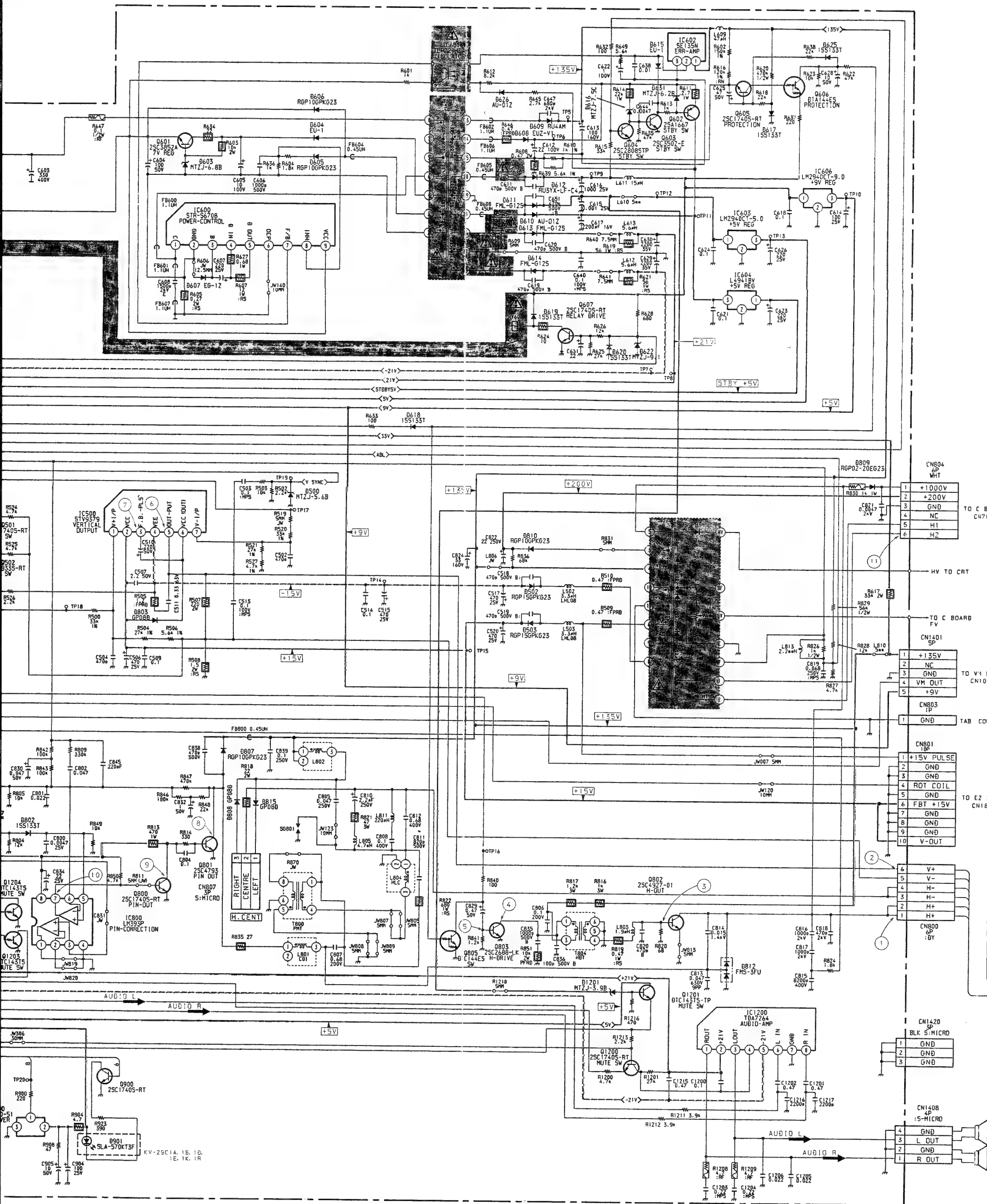
IC		DIODE	
IC500	G-13	D600	A-7
IC600	B-8	D601	C-6
IC601	D-6	D603	C-7
IC602	F-10	D604	D-7
IC603	G-5	D605	C-6
IC604	F-7	D606	C-6
IC606	E-6	D607	C-7
IC800	F-12	D608	F-9
IC900	D-1	D609	F-9
IC1200	G-10	D610	F-7
IC1201	F-5	D611	F-6
		D612	E-7
		D613	F-8
		D614	F-8
		D615	H-7
		D616	G-7
		D617	F-9
		D618	F-11
		D619	E-6
		D620	E-6
		D622	E-6
		D625	G-9
		D626	G-6
		D631	F-6
		D800	F-12
		D801	G-12
		D802	G-12
		D803	F-13
		D807	E-12
		D808	E-14
		D809	A-14
		D810	A-13
		D812	B-11
		D815	E-14
		D817	H-11
		D901	C-1
		D902	I-5
		D903	H-4
		D904	H-5
		D905	I-5
		D906	I-5
		D1201	G-6

DIODE

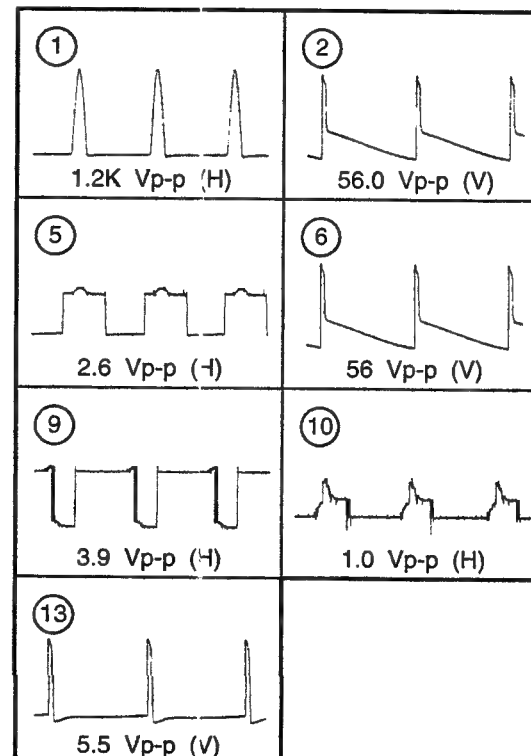
D500	H-12
D502	H-13
D503	I-14
D504	H-11
D505	H-13
D506	I-14
D507	H-13







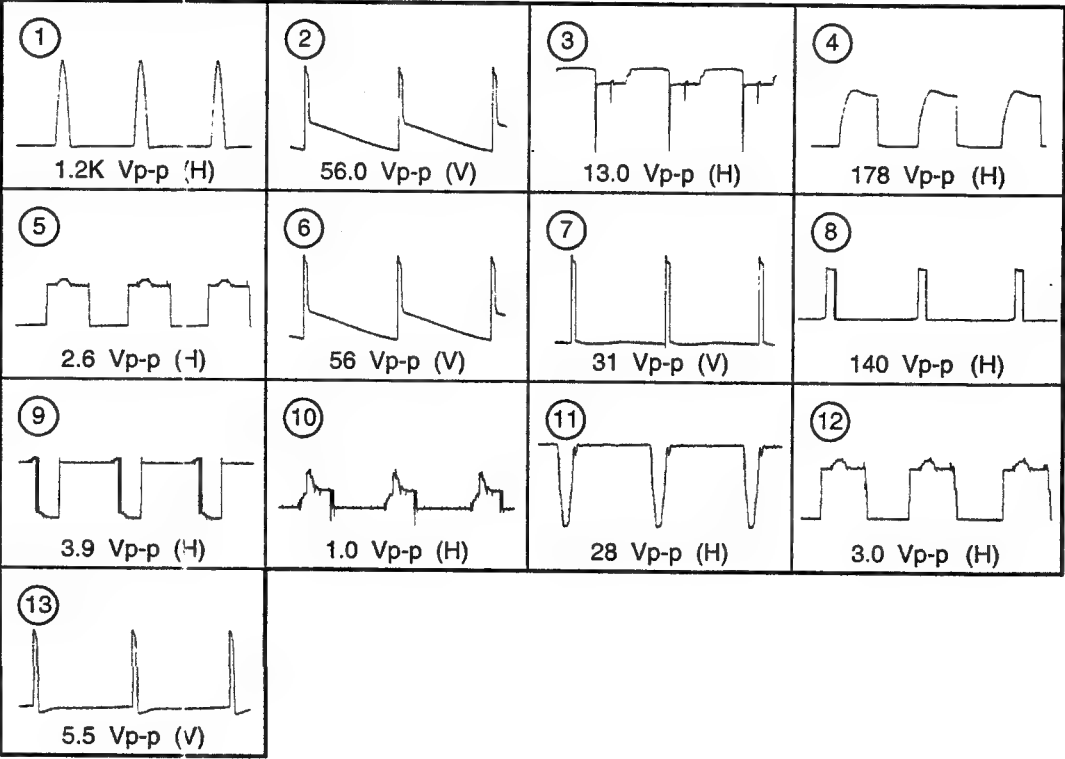




### D BOARD TRANSISTOR VOLTAGE TABLE

Ref No	B Base	C Collector	E Emitter
Q501	-0.1	0.2	-
Q502	0.1	-5.8	-
Q503	-5.8	-12.0	-12.0
Q602	72.0	7.5	72.7
Q603	0	72.0	-
Q604	0.7	-	-
Q605	0.5	-	0.3
Q606	-	-	12.0
Q607	-	12.0	-
Q800	0.2	3.1	-
Q801	0.3	17.0	-
Q802	-0.2	143.3	-
Q803	-0.6	99.8	-
Q805	-	3.6	-
Q900	-	5.4	-
Q1200	2.9	21.5	4.6
Q1201	3.4	5.0	3.0
Q1202	2.8	-	-

WAVEFORMS D BOARD

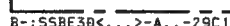


D BOARD  
TRANSISTOR VOLTAGE TABLE

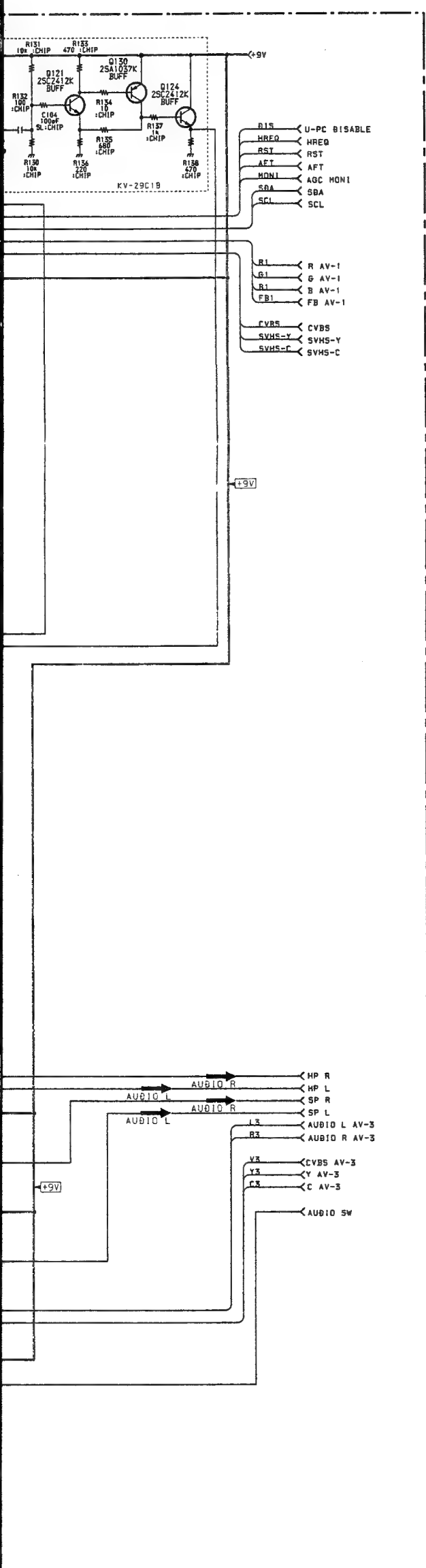
Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q501	-0.1	0.2	-
Q502	0.1	-5.8	-
Q503	-5.8	-12.0	-12.0
Q602	72.0	7.5	72.7
Q603	0	72.0	-
Q604	0.7	-	-
Q605	0.5	-	0.3
Q606	-	-	12.0
Q607	-	12.0	-
Q800	0.2	3.1	-
Q801	0.3	17.0	-
Q802	-0.2	143.3	-
Q803	-0.6	99.8	-
Q805	-	3.6	-
Q900	-	5.4	-
Q1200	2.9	21.5	4.6
Q1201	3.4	5.0	3.0
Q1202	2.8	-	-

D BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC500	1	1.5
	2	15.0
	3	-12.3
	4	-14.0
	5	0.1
	6	15.2
	7	1.4
IC600	1	170.0
	2	-62.4
	3	-62.6
	4	-62.2
	5	-62.0
	6	-62.6
	7	-62.4
	8	-62.0
	9	-58.0
IC601	1	64.3
	2	63.0
	3	-62.5
	4	-58.6
IC602	1	135.0
	2	63.2
	3	-0.1
IC800	3	0.9
	5	1.5
	6	2.0
	7	0.2
	8	9.0
IC1200	2	21.7
	4	21.5
	5	-21.7
IC1201	1	4.0
	2	9.0
	3	4.0
	5	0.5
	8	0.5



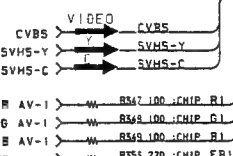
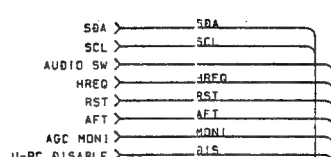
Model Ref. No.	29C1A	29C1B	29C1D	29C1D 1	29C1E	29C1K	29C1R
C19	—	—	—	—	—	0.033MF	0.033MF
C370	—	2.2UF	2.2UF	2.2UF	2.2UF	2.2UF	2.2UF
C372	—	0.1UF	0.1UF	0.1UF	0.1UF	0.1UF	0.1UF
C373	—	0.22UF	0.22UF	0.22UF	0.22UF	0.22UF	0.22UF
D370	—	BAS216	BAS216	BAS216	BAS216	BAS216	BAS216
IC202	MSP3400C-P5	MSP3410-15	MSP3400C-PS	MSP3400C-PS	MSP3410-15	MSP3400C-PS	MSP3400C-PS
IC303	—	TDA8395T	TDA8395T	TDA8395T	TDA8395T	TDA8395T	TDA8395T
R51	—	—	—	—	—	4.7K	4.7K
TU101	TUVIF (AEP)	TUVIF (FR)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)



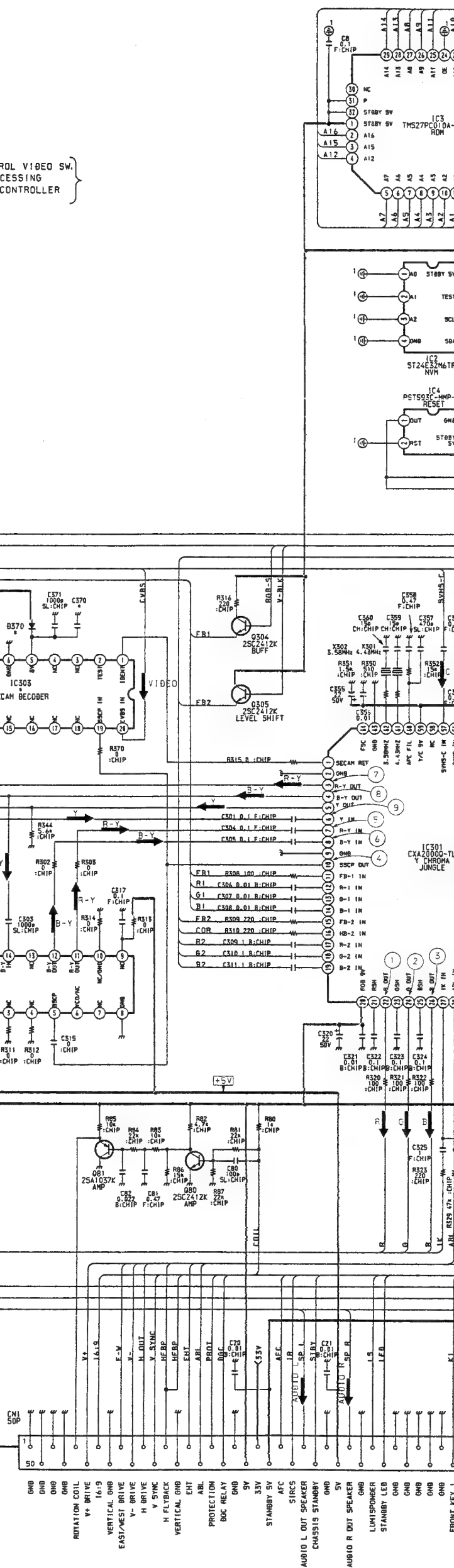
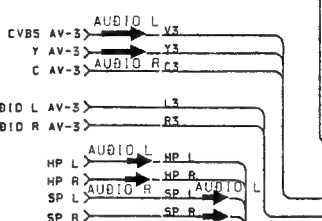
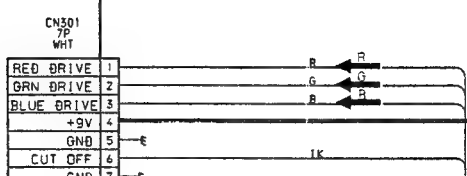
B-SSBE3D&lt;...&gt;-A--29C1

A<sub>(2/2)</sub>

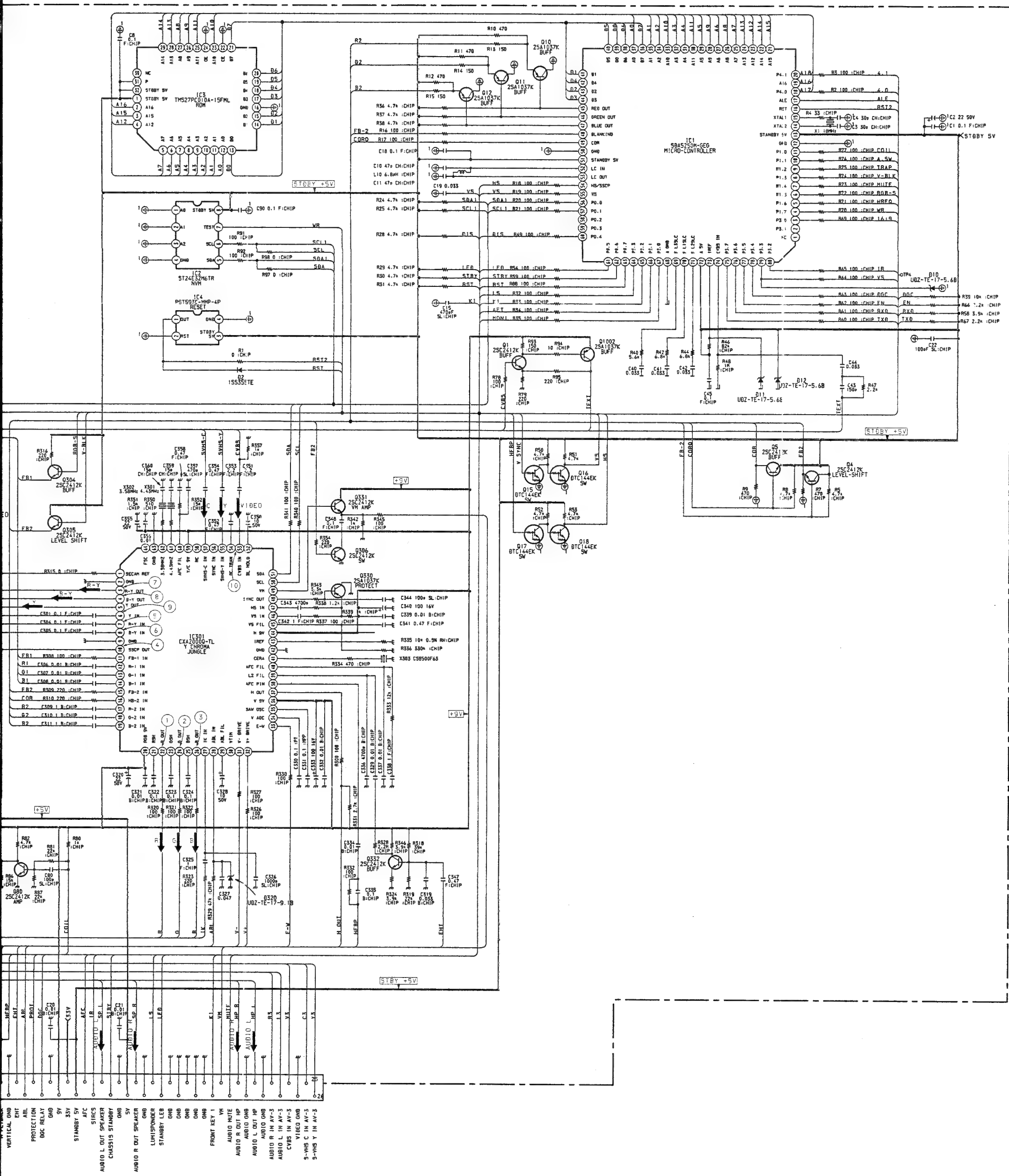
TUNER, AUDIO CONTROL VIDEO SW,  
DIGITAL SIGNAL PROCESSING  
Y/C JUNGLE MICRO CONTROLLER



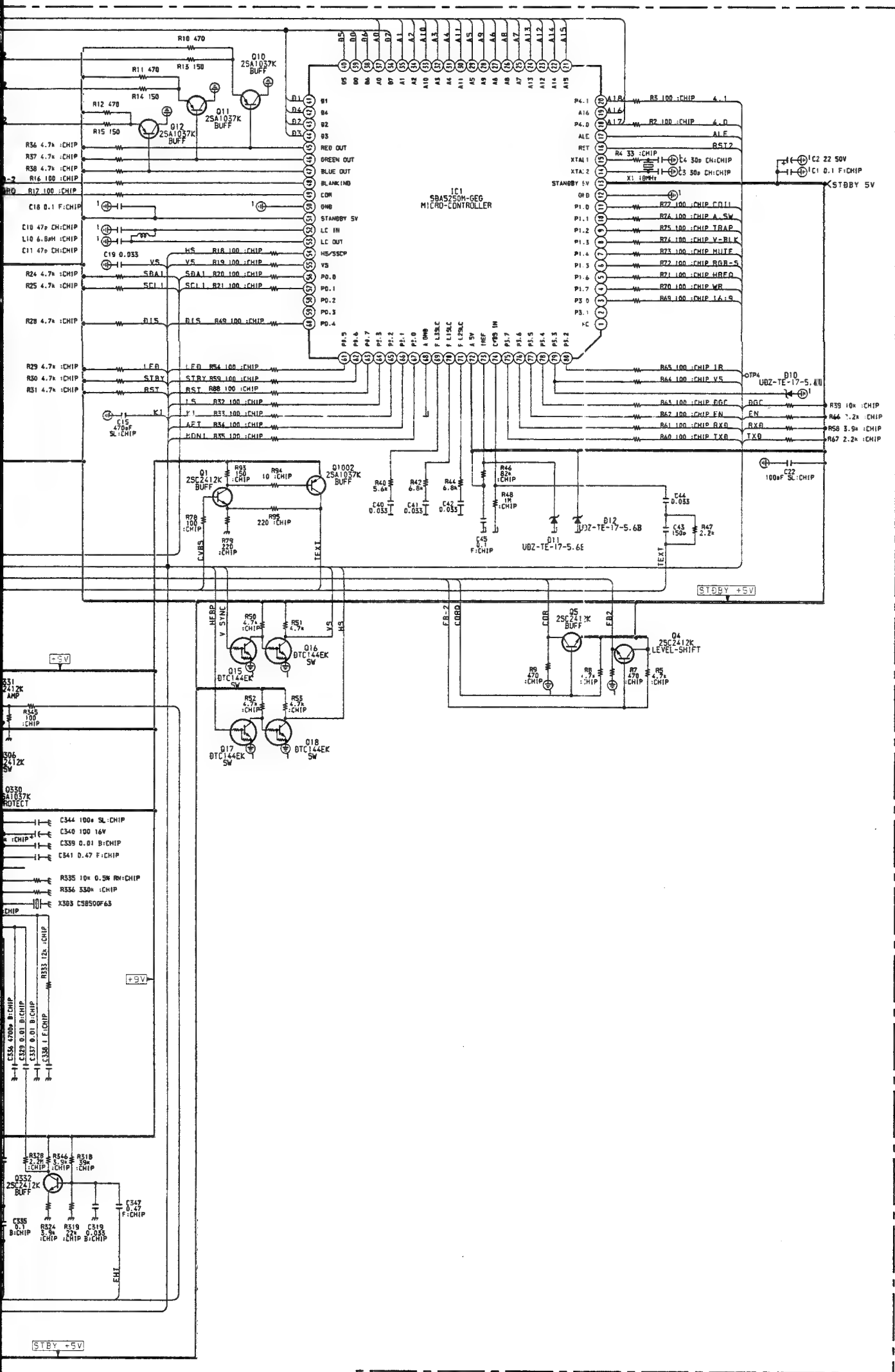
TO C BOARD  
CN703



TO B BOARD  
CN902

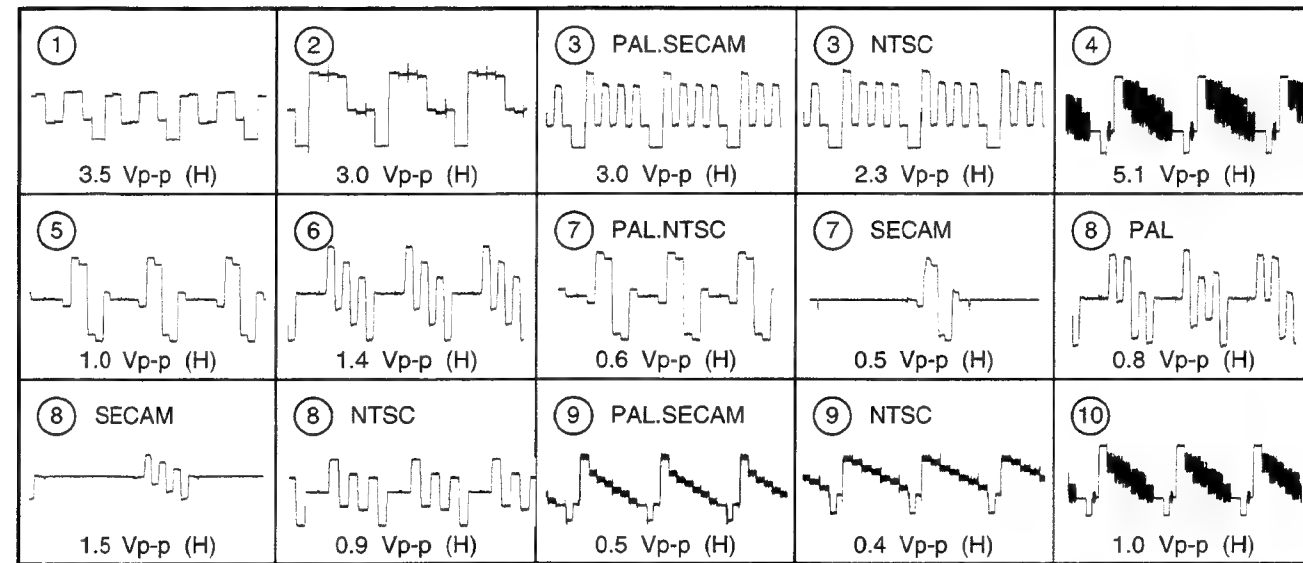


TO 8 BOARD  
CN902





## WAVEFORMS A BOARD



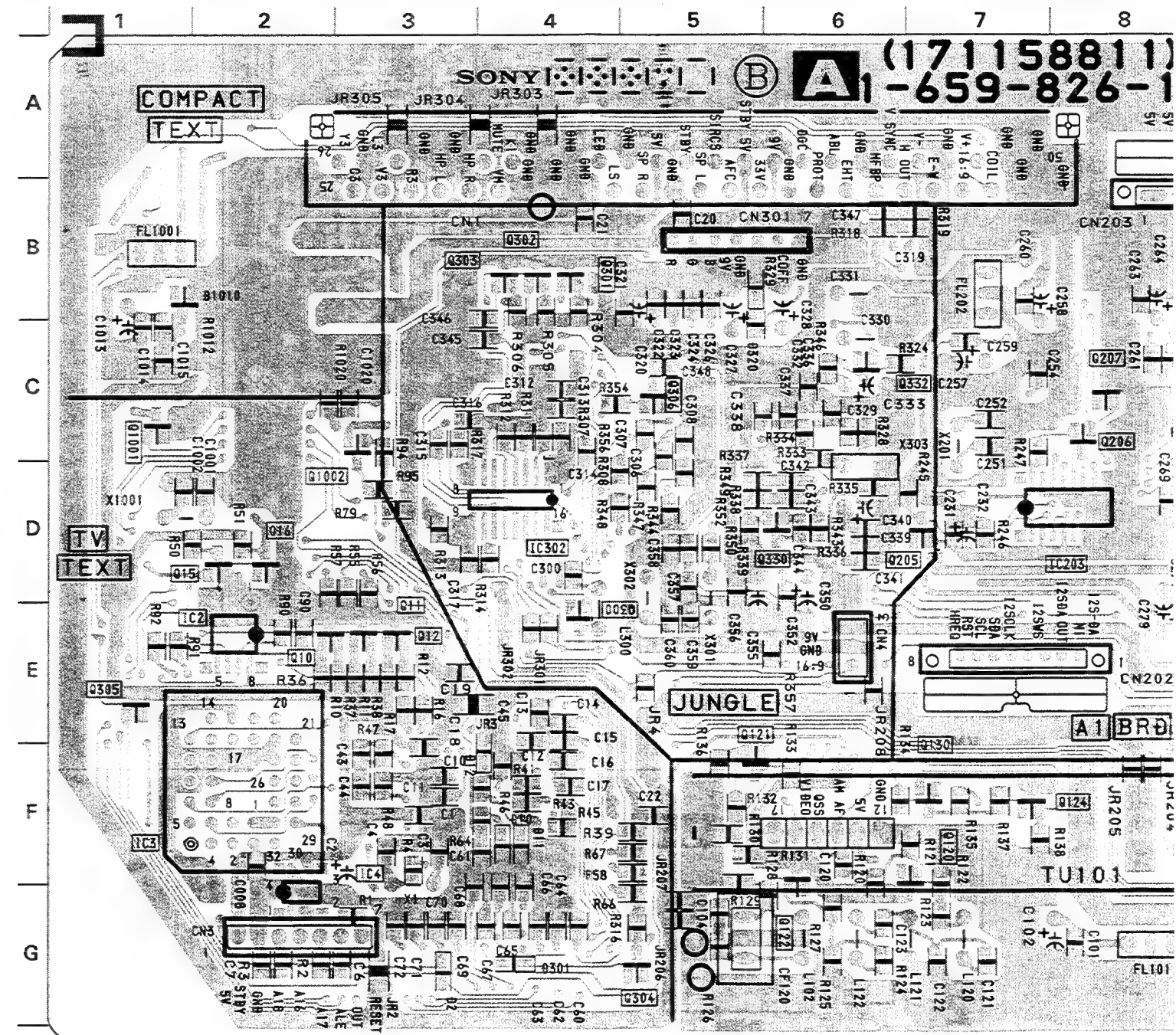
A (2/2) BOARD IC VOLTAGE TABLE

IC Voltage Table								
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC1	2	3.6	IC301	5	3.6	IC301	61	5.0
	3-4	4.8		6	5.0		62	7.6
	5	0.5		7-8	5.4	IC302	1	4.8
	7	4.8		10	0.6		5	0.7
	9	4.8		12-14	5.4		9	4.8
	11	2.4		16	4.0		11-12	3.0
	13	4.8		17-19	5.4		14	1.3
	14-15	2.3		20	8.8		16	1.3
	16-17	4.8		22-23	2.2	IC303	5	8.0
	48	4.0		24	2.0		3.2	10
	51	4.8		25	2.4		11	5.6
	52-53	2.4		26	2.0		0	19
	54	0.7		27	4.0		20	3.7
	55	0.2		28	6.6		4	0.2
	56-57	4.8		29	8.8	5	0.7	
	58	2.8		31-33	3.0	IC1001	4	0.2
	59	3.5		34	4.0		5	0.7
	60	2.4		35	4.6		6	1.7
	62	0.7		36	8.8		7	1.8
	63	4.4		37	3.1		10	0.4
	65	4.8		38	3.4		11-12	4.8
	66	2.1		39	5.3		16	4.8
	67	2.0		40	4.2		17	0
	69-71	2.3		41	2.3		21	4.8
	72	4.8		43	1.7		23	3.0
	73	1.5		44	8.8		25	4.8
	74	1.2		45	2.5		56	0
	75-77	4.8		46	3.9		61	1.3
	79	0.2		47	3.0		62-63	1.4
	80	4.8		48	4.4		64	0
IC2	5-8	4.8	49	6.3	66		4.6	
IC3	1	4.8	50-51	0.1	67		4.7	
	31-32	4.8	53	3.9	68		4.0	
IC4	1	4.8	54	5.0				
	3	4.8	55-56	4.2				
IC301	1	1.5	58-59	8.8				
	3-4	5.6	60	5.3				

A

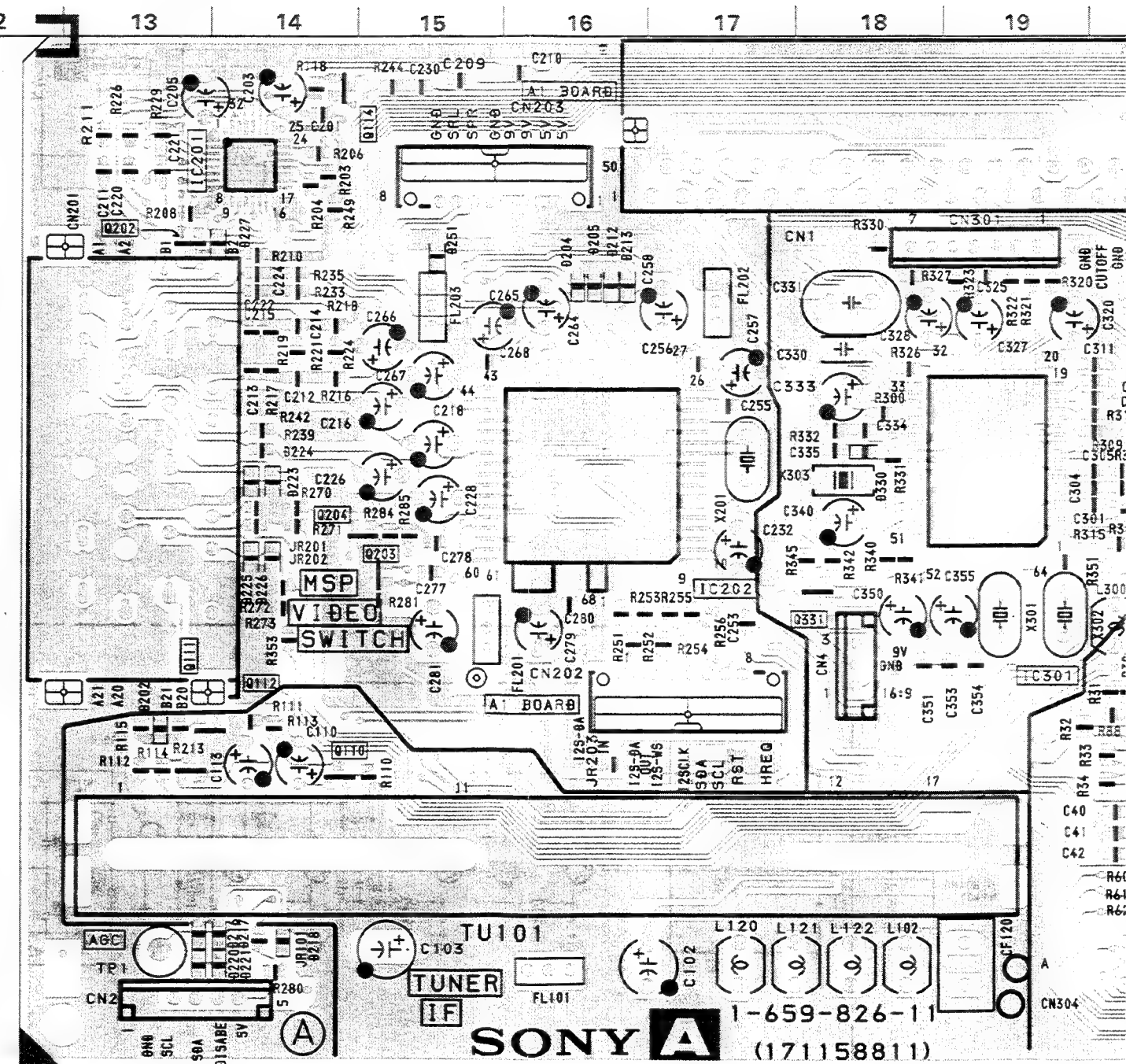
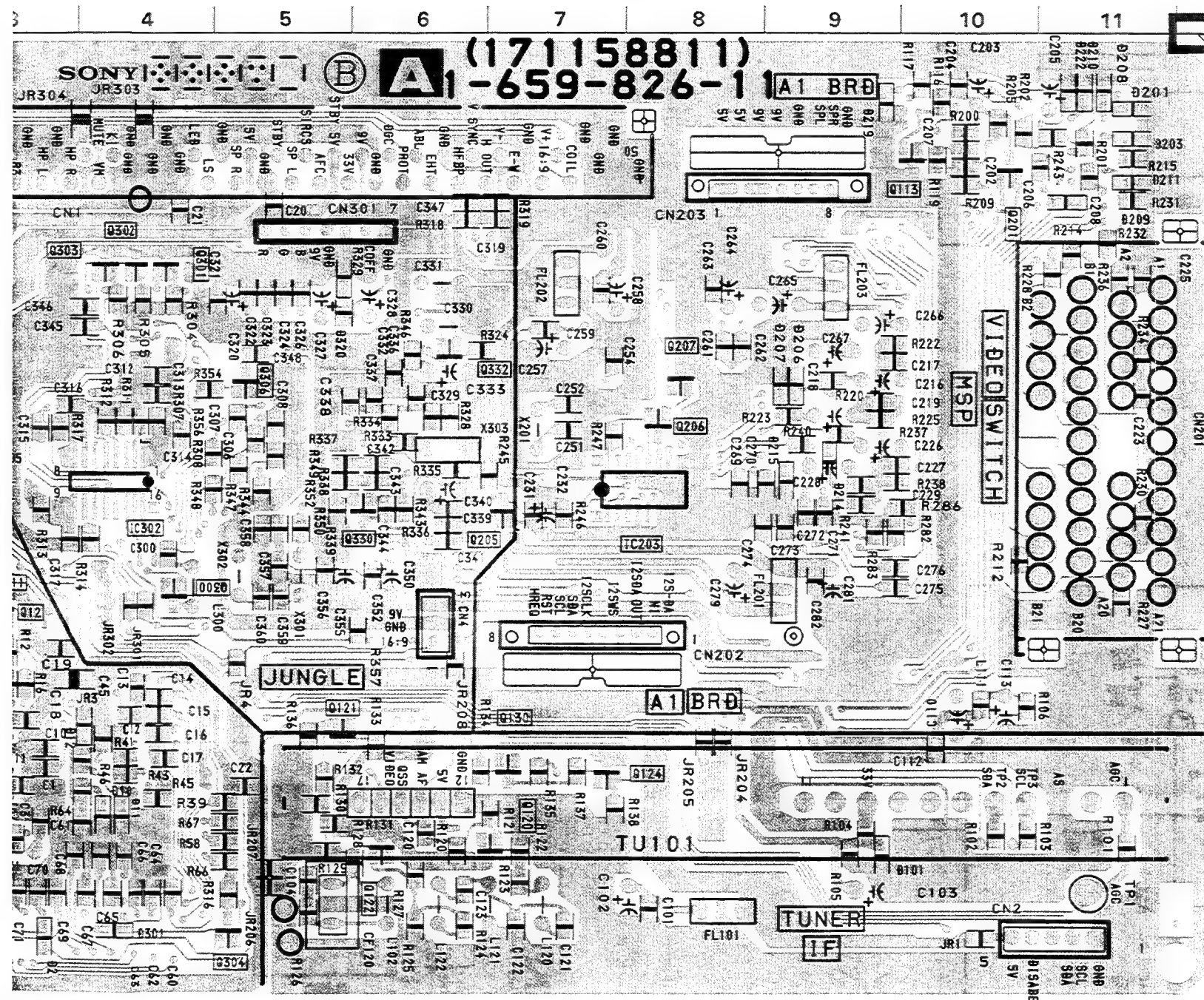
TUNER, AUDIO CONTROL VIDEO SW, DIGITAL SIGNAL PROCESSING  
Y/C JUNGLE MICRO CONTROLLER

## A Board &lt;Conductor Side&gt;



DIGITAL SIGNAL PROCESSING

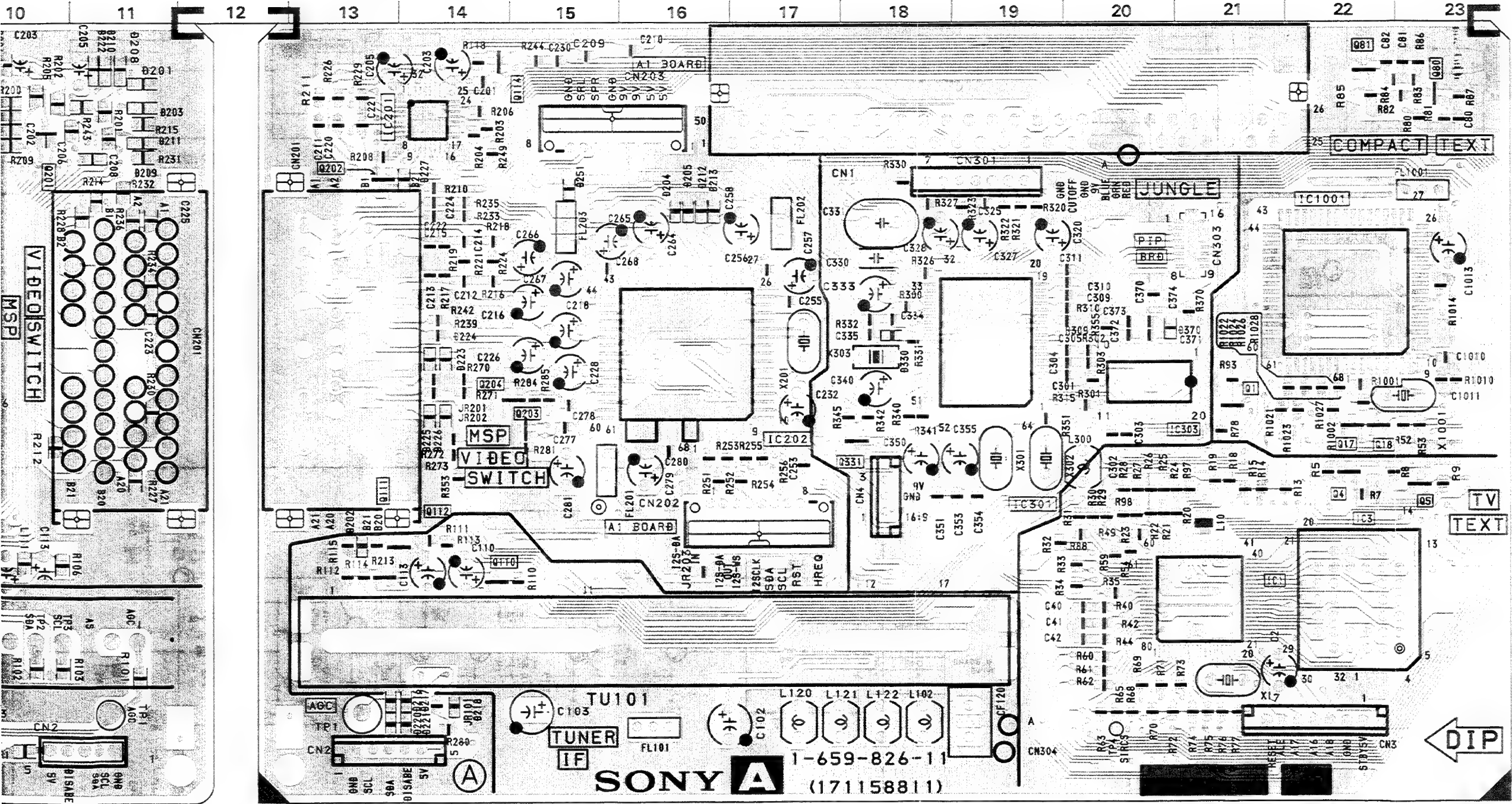
### A Board <Component Side>

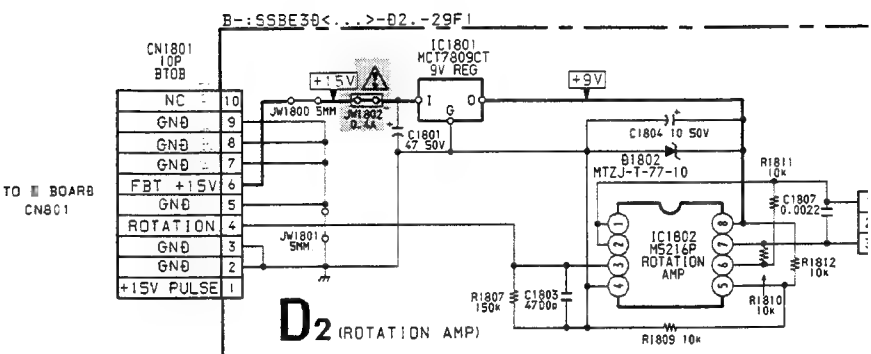
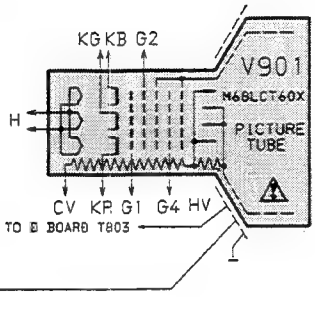
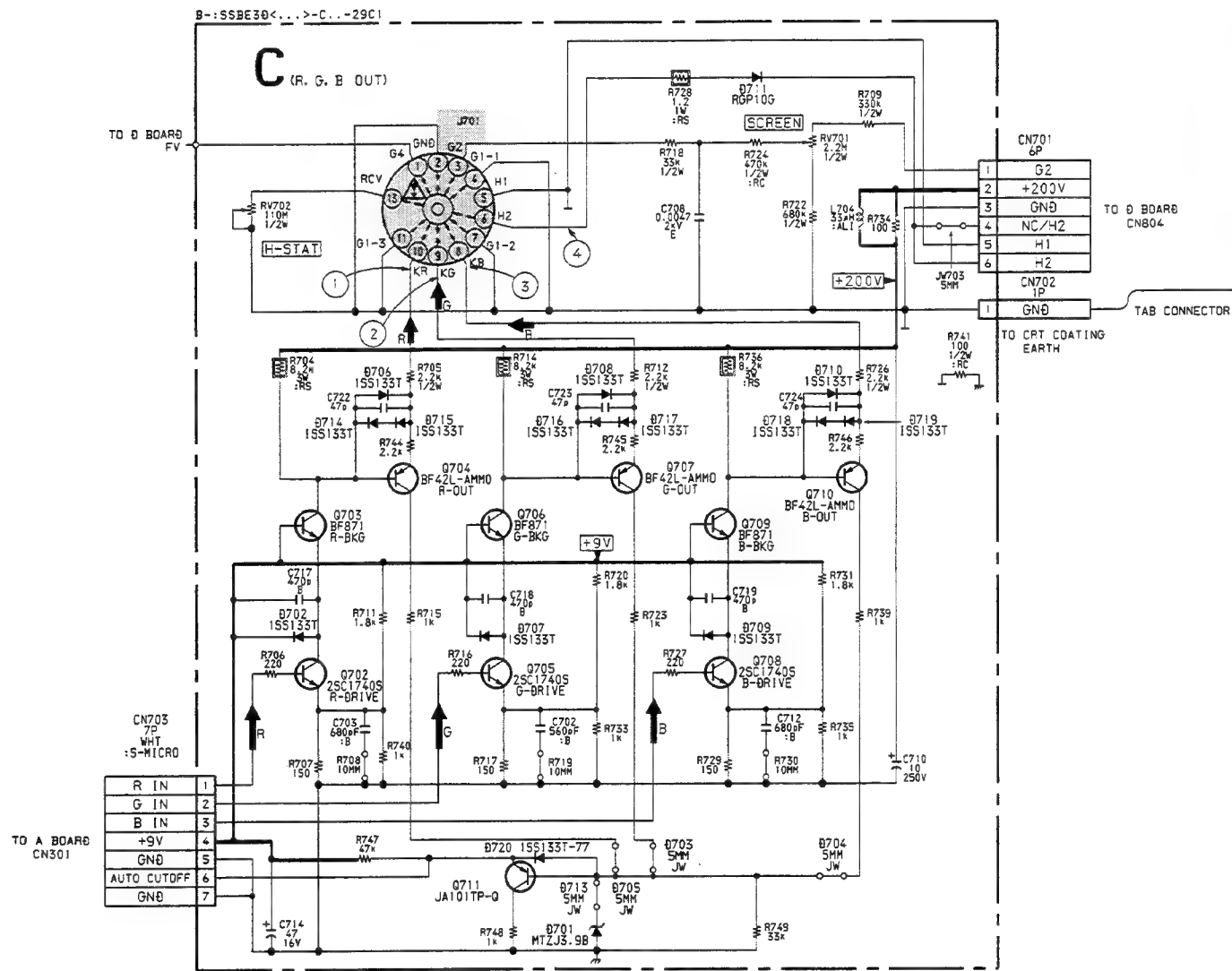




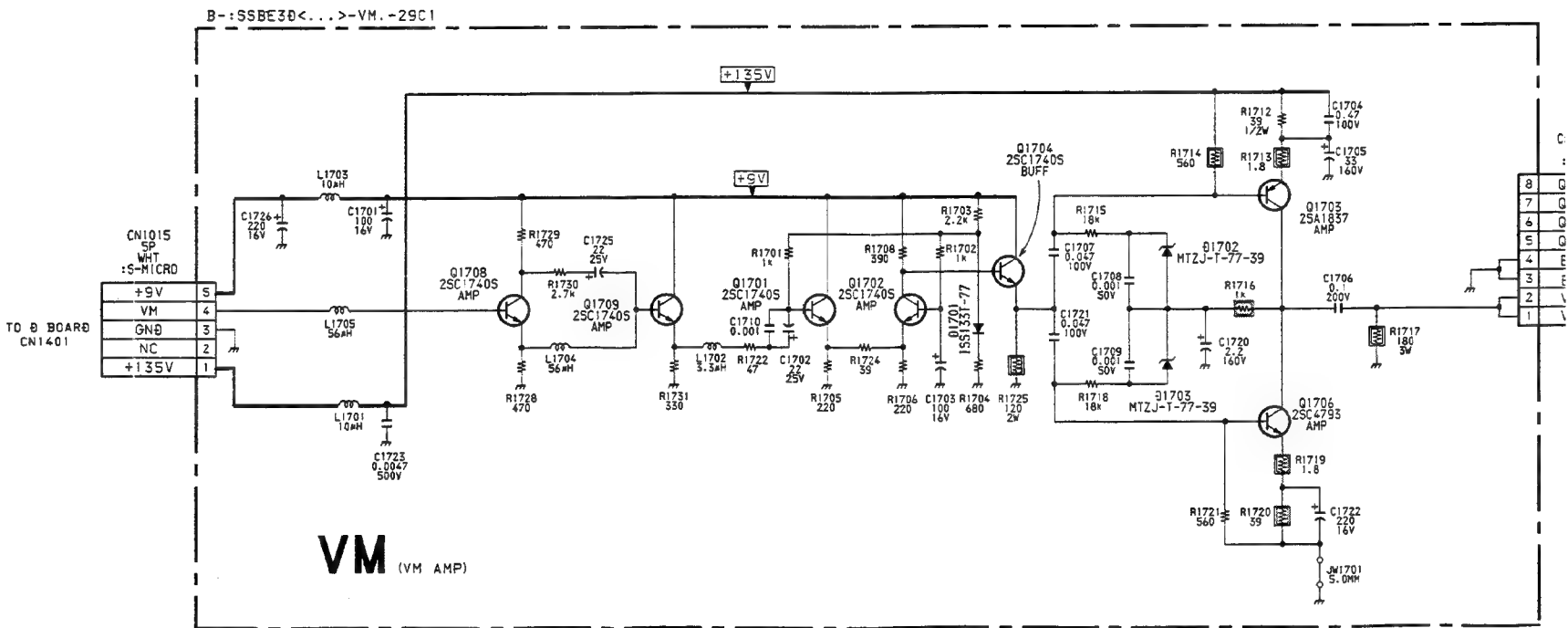
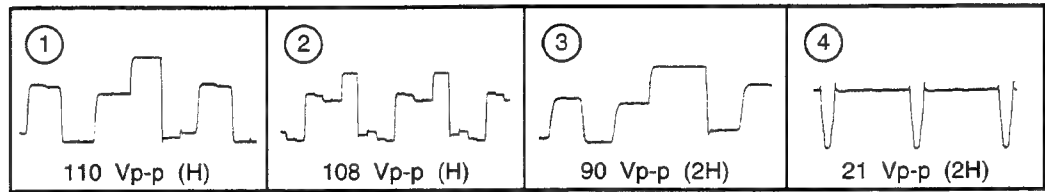
A Board <Component Side>

A BOARD			
IC		Q305	E-1
IC1	F-21	Q306	C-5
IC2	E-2	Q330	D-6
IC3	F-2	Q331	D-18
IC4	G-2	Q332	C-6
IC201	A-14	Q1002	C-3
IC202	C-16	DIODE	
IC203	D-8	D2	G-3
IC301	C-19	D10	F-10
IC302	D-4	D11	F-10
IC303	D-21	D12	F-4
TRANSISTOR		D101	F-9
Q1	D-21	D201	A-11
Q4	E-22	D202	E-13
Q5	E-23	D203	A-11
Q10	E-2	D204	B-16
Q11	E-3	D205	B-16
Q15	D-2	D206	C-9
Q16	D-2	D207	C-9
Q17	D-22	D208	A-11
Q18	D-23	D209	B-11
Q80	A-23	D210	A-11
Q81	A-22	D211	B-11
Q110	F-14	D212	B-16
Q111	E-14	D213	B-16
Q112	E-14	D214	D-9
Q113	A-10	D215	D-9
Q114	A-14	D216	G-14
Q120	F-7	D217	G-14
Q121	F-5	D218	G-14
Q122	F-6	D220	G-14
Q124	F-7	D221	D-14
Q130	F-7	D222	D-14
Q201	B-10	D223	D-14
Q202	B-13	D224	D-14
Q203	D-15	D225	D-14
Q204	D-15	D226	D-14
Q205	D-7	D227	B14
Q206	C-8	D251	B-15
Q207	C-8	D320	C-5
Q304	G-5	D370	C-21





WAVEFORMS C BOARD



C

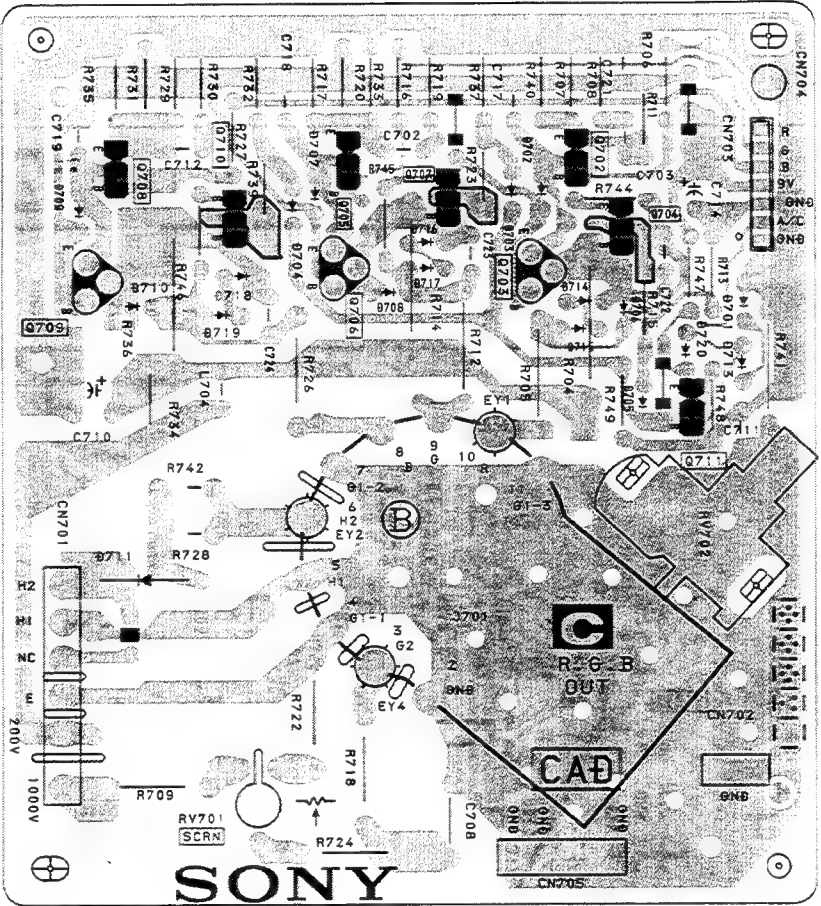
[ R, G, B OUT ]

VM

[ VM AMP ]

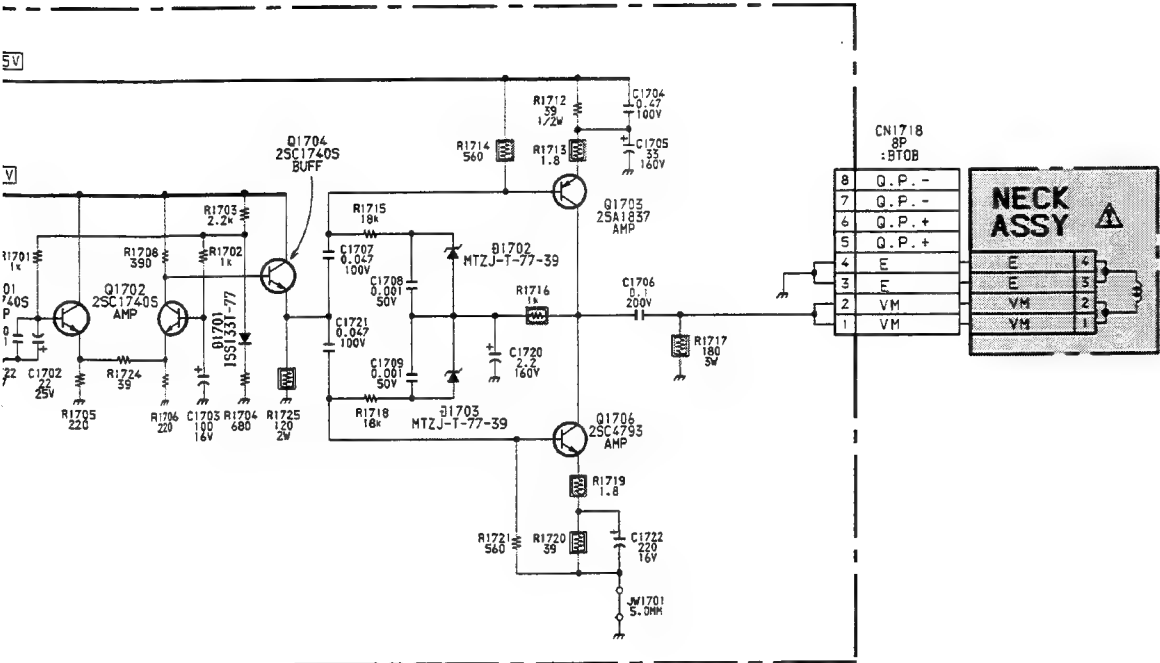
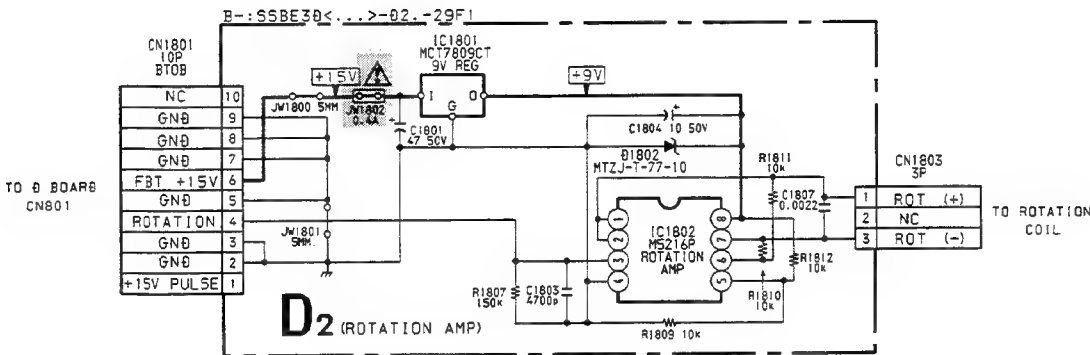
C

C Board

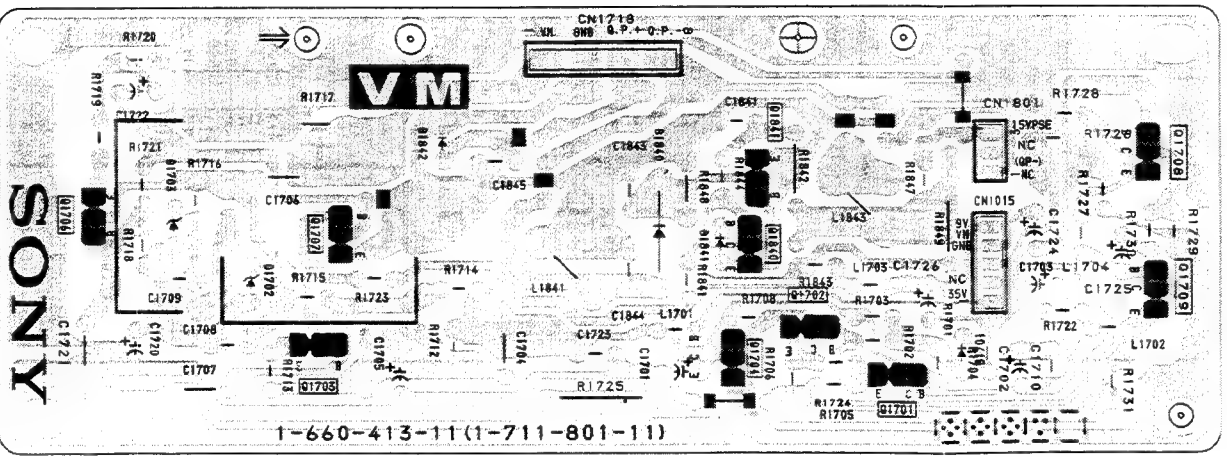


D2

(1-710-957-11) 1-658-225-11



VM Board



C BOARD  
TRANSISTOR VOLTAGE T.

Transistor Voltage Table				
Ref No	B Base	C Collector	E Em	
Q702	2.0	11.4	1	
Q703	12.0	168.3	11	
Q704	168.3	6.0	16	
Q705	1.7	11.4	1	
Q706	12.0	178.8	11	
Q707	178.2	6.2	17	
Q708	2.0	11.4	1	
Q709	12.0	168.3	11	
Q710	168.0	6.4	16	



KV-29C1

KV-29C1

**C**

[ R, G, B OUT ]

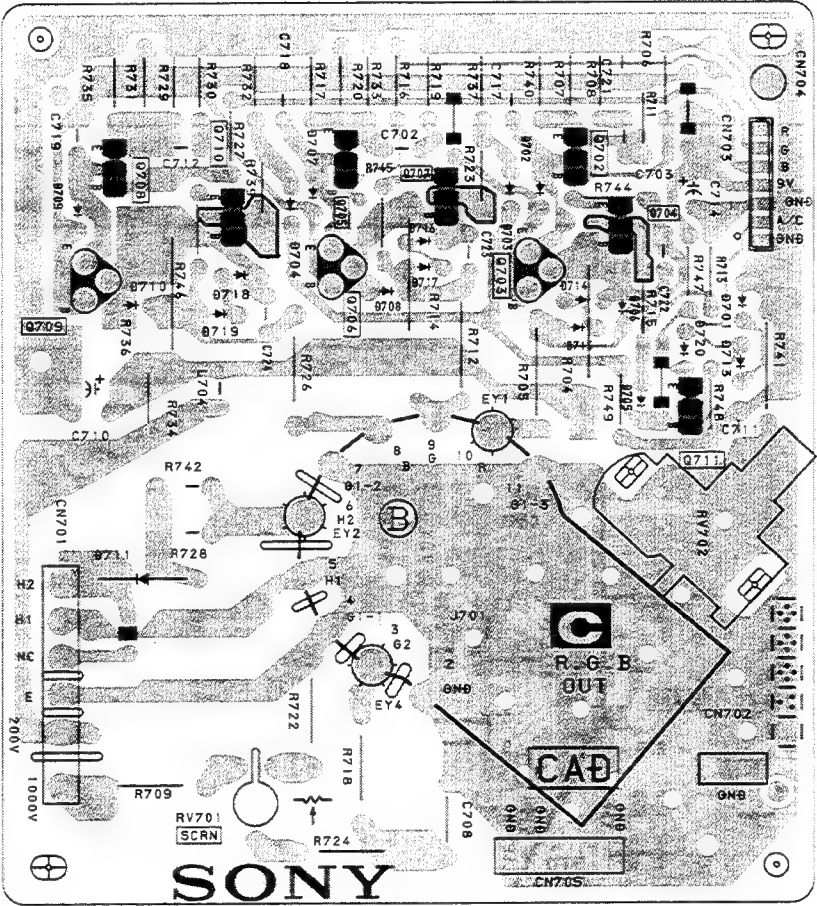
**VM**

[ VM AMP ]

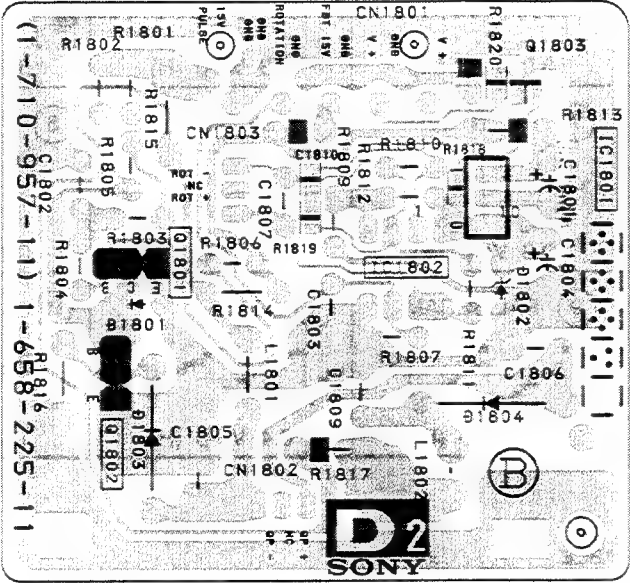
**D2**

[ ROTATION AMP ]

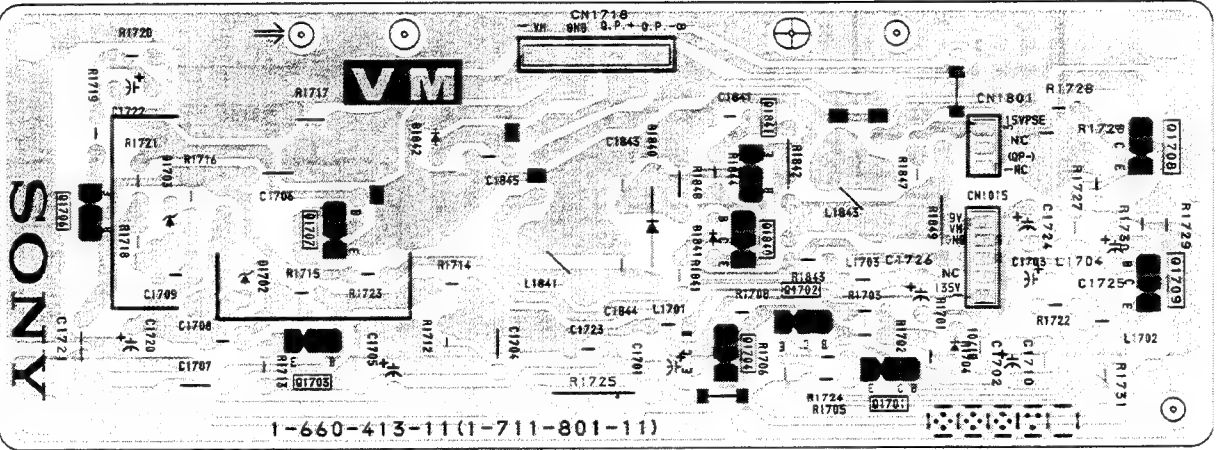
C Board



D2 Board



VM Board



C BOARD  
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q702	2.0	11.4	1.4
Q703	12.0	168.3	11.4
Q704	168.3	6.0	163.5
Q705	1.7	11.4	1.2
Q706	12.0	178.8	11.4
Q707	178.2	6.2	173.8
Q708	2.0	11.4	1.4
Q709	12.0	168.3	11.4
Q710	168.0	6.4	160.0

VM BOARD  
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q1701	2.5	8.8	1.8
Q1702	2.5	5.5	1.8
Q1703	134.3	71.8	134.8
Q1704	5.5	8.8	4.8
Q1706	1.0	71.8	0.4
Q1707	0.7	-	-
Q1708	2.9	6.6	2.2
Q1709	2.2	8.8	1.5
Q1840	0.6	-	-

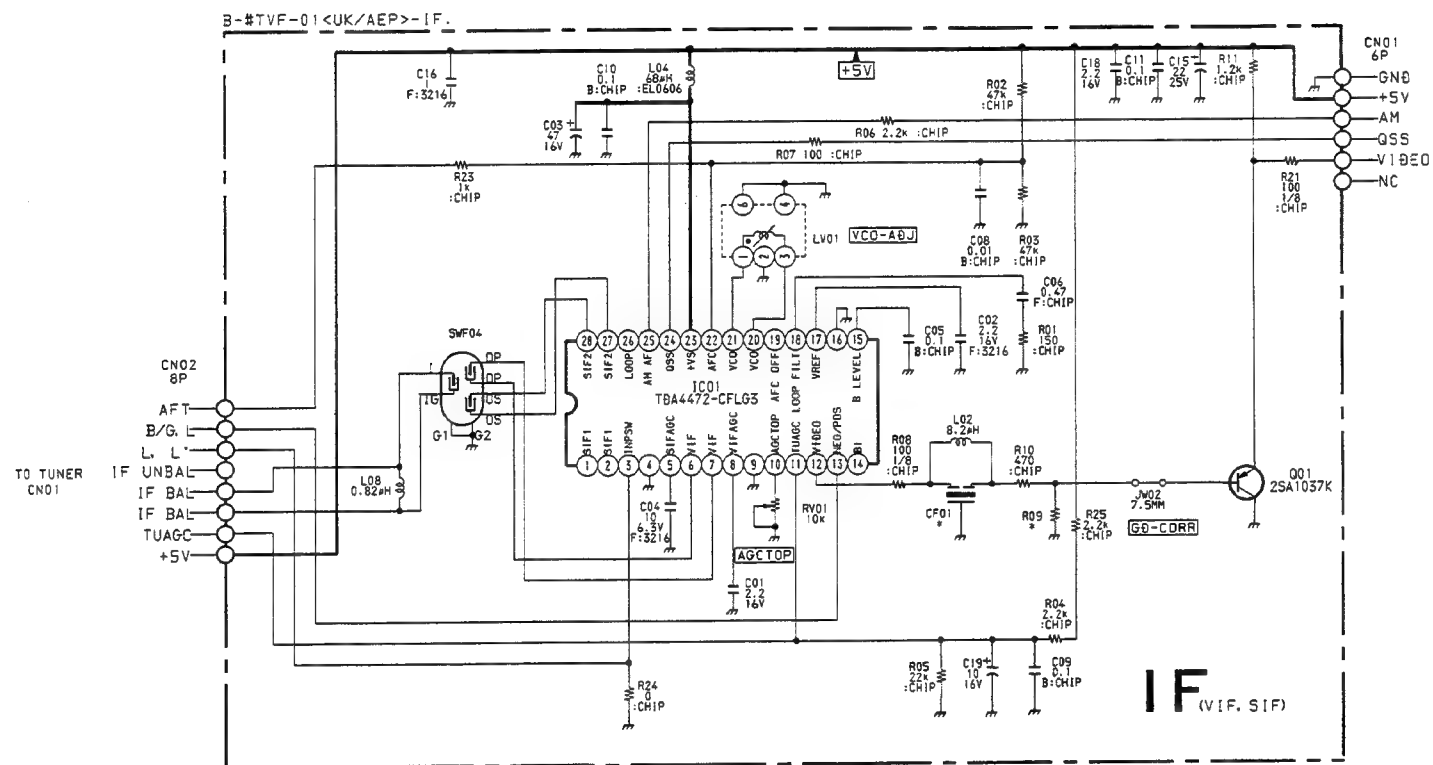
D2 BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC1802	1-2	2.8
	3	3.0
	5-6	4.4
	7	6.2
	8	9.0

KV-29C1

KV-29C1

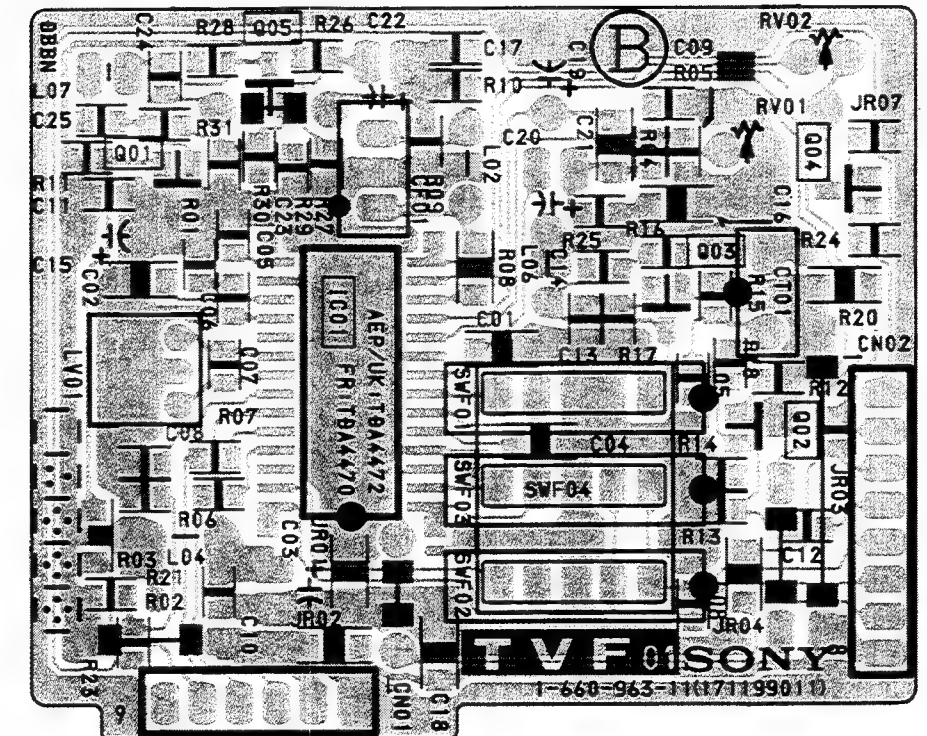
## VIF (AEP) (KV-29C1A, 29C1D, 29C1D 1, 29C1E, 29C1K ONLY)



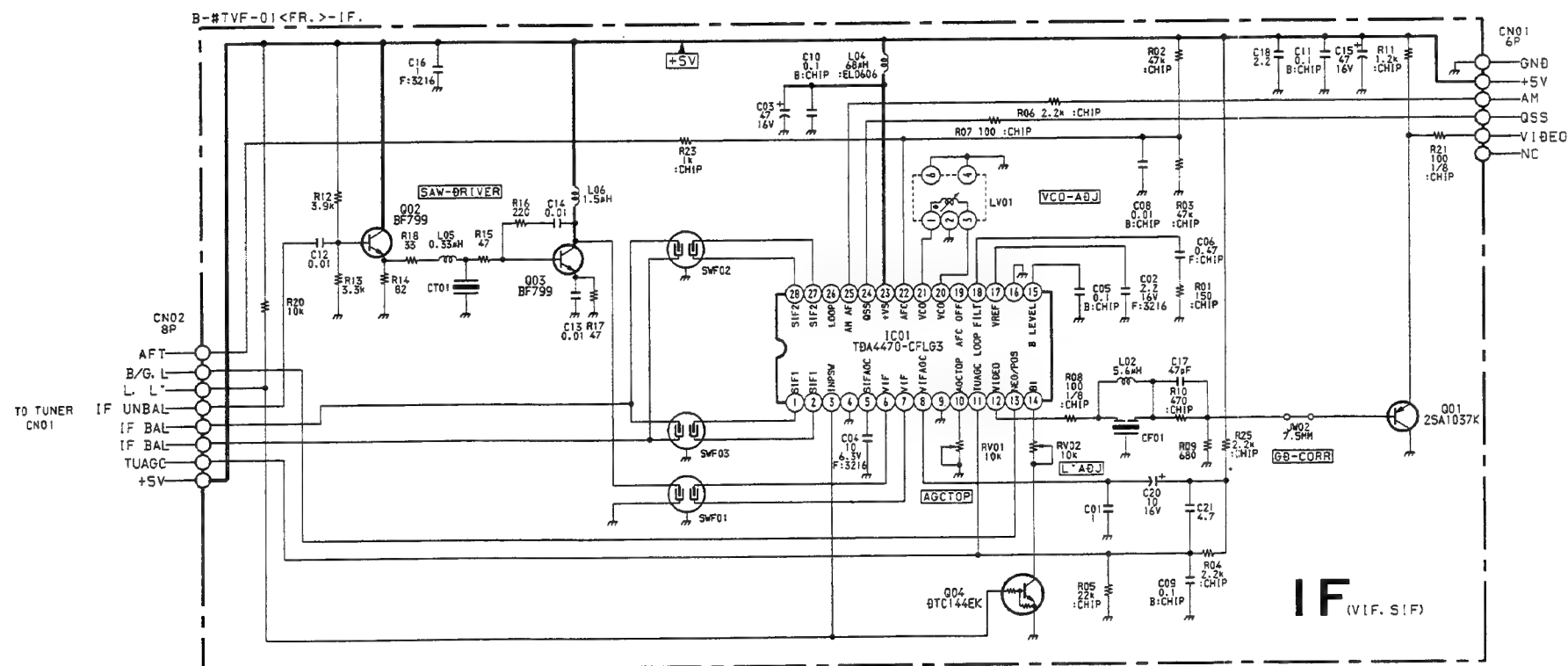
IF

[ VIF, SIF ]

## IF Board

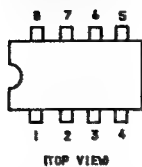


## VIF (FR) (KV-29C1B ONLY)



## 5-4. SEMICONDUCTORS

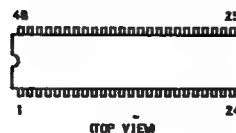
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RC4558P  
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TBA129  
T0A1543  
TEA2014A  
TEA2031A



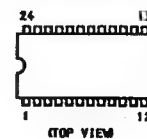
CX20061



SAA5246P/E/M4A



T0A6600-2



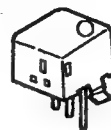
BF871



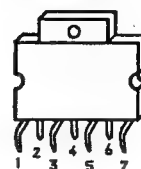
FCB61C65L-70P  
S0A20560-A012



SBX1610-11

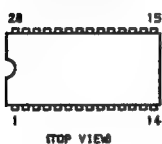


T0A8170

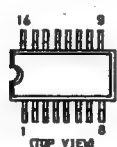


0TA144EK  
0TC114EK  
0TC124EK  
0TC144EK  
MMST2907A  
2SA1037K  
2SA1162  
2SA812  
2SB1295  
2SC1623  
2SC2412  
2SC2712

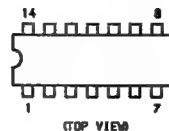
CXA1114P  
CXK5864BP-10L  
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SAA7280  
TC5565APL-15L  
T0A4580-V7  
T0A6200  
TEA2028B



HCF4052BM



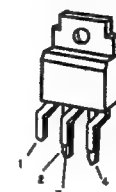
SN74LS02N



LM7812CT  
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TEA7605  
μPC24M05HF



T0A2050



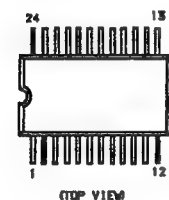
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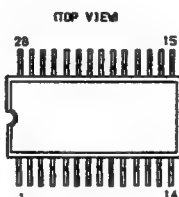
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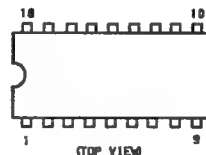
CX01175AM



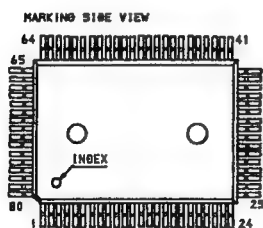
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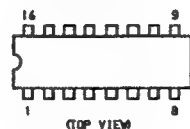
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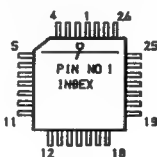
CX02011Q



MC14051BCP  
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T0A4660T  
T0A8442N3  
TEA2260  
μPB4053BC



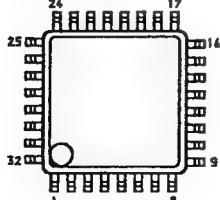
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CXK1202Q



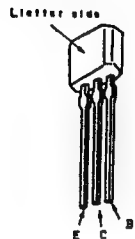
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2SB1357  
2SC2688



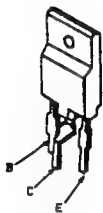
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2SD773  
2SD774



2SC2785



2SD1548



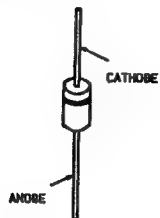
2SD1941



2SD2096



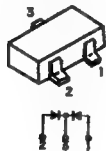
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BB809  
ERC06-15S  
ERC25-06S  
RGP10G  
RU-3AM



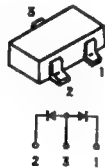
CTU-12S



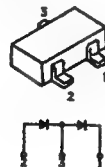
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ĐAN212K  
MA152WK  
1S2837



ĐAP202K



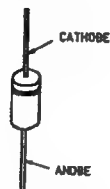
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1S226



Đ4SB60L-F



EGP20G  
GP08Đ  
RGP02-17  
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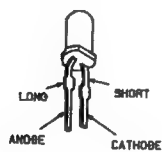
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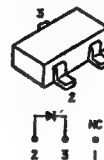
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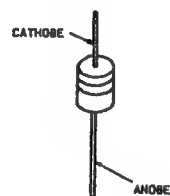
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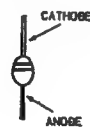
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MA3110  
MA3036H  
MA3068M  
RĐ11M-B2  
RĐ3.6M-B2  
RĐ5.6M-B2  
RĐ6.8M-B2



MTZJ-13B  
MTZJ-15A  
MTZJ-33A  
MTZJ-36Đ  
MTZJ-3.9B  
MTZJ-4.7B  
MTZJ-5.6B  
MTZJ-6.2C  
MTZJ-7.5C  
MTZJ-9.1C  
MTZN-10C  
RĐ5.6ESB2  
RĐ6.2ESB2  
RĐ6.8ESB2  
RĐ7.5ESB2  
RĐ9.1ESB3  
UZ4.7BSC  
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1SS133



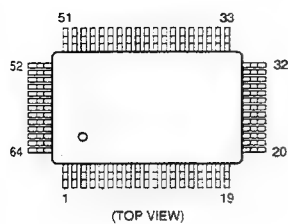
U05G



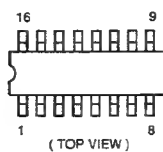
18E

## 5-4. SEMICONDUCTORS

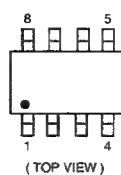
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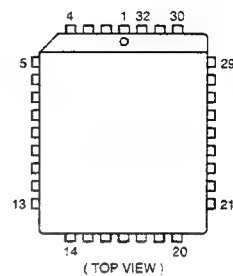
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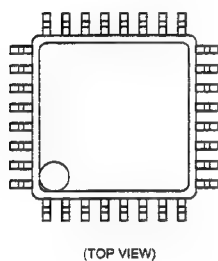
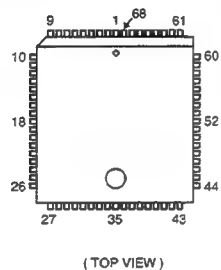
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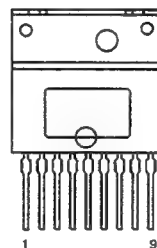
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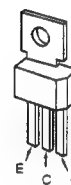
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MSP3410-15

STR-S6708



BF871-127



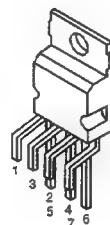
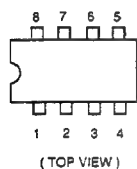
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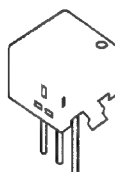
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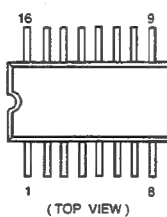
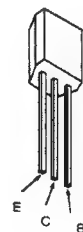
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2SA733-K  
2SA933AS  
2SA933S  
2SA1091-O  
2SC3502-F  
2SC2808STP-RLM393P  
M5216P  
TDA2822M  
 $\mu$ PC393C

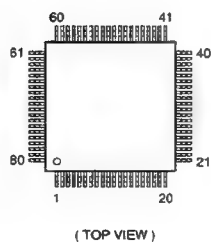
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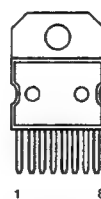
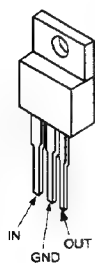
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DTC114ES  
DTC143TS  
DTC144ES  
2SC1740S-RT

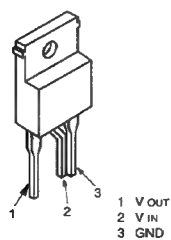
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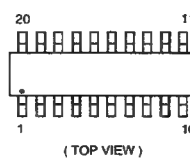
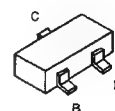
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LM2940T-9.0  
MCT7809CT  
NJM78M09FA  
 $\mu$ PC2405HF

SE135N

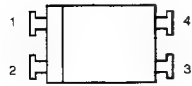


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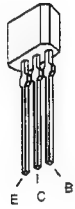
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2SA1162-G  
2SC2412K



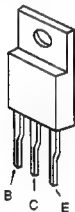
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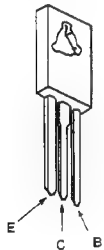
2SA1175-HFE  
2SC2785-HFE



2SA1667  
2SA1837  
2SC3852A



2SC2688-LK



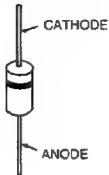
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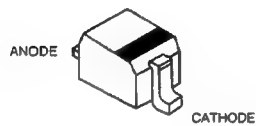
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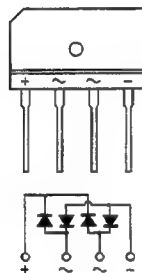
AU-01Z-V1 GP08D  
EG-1Z-V1 RGP02  
EGP20G RGP10GPKG23  
EL1Z RGP15GPKG23  
EM1-V1 RU3YX  
EU-1-V1 RU4AM-T3  
EU2-V1 RU4DS  
FML-G12S



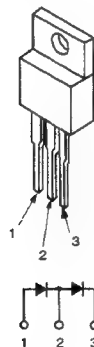
BAS216 MA8330  
DTZ6.8C 1SS355  
DTZ9.1 UZD-TE-17-5.6B  
DTZ33B UZD-TE-17-9.1B



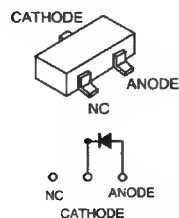
D4SB60L



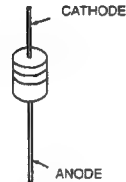
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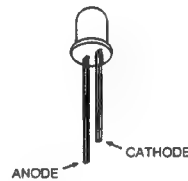
MA3030H(TX)



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MTZJ-3.9B RD5.1ESB2  
MTZJ-5.1B RD5.6ESB2  
MTZJ-5.6B RD6.2ESB2  
MTZJ-6.2B RD6.8ESB2  
MTZJ-6.8B RD7.5ESB2  
MTZJ-7.5C RD10ESB2  
MTZJ-T-77-9.1A  
MTZJ-10 RD39ES-B2  
MTZJ-39C 1SS133T-77



SLA-570KT3F



## SECTION 6

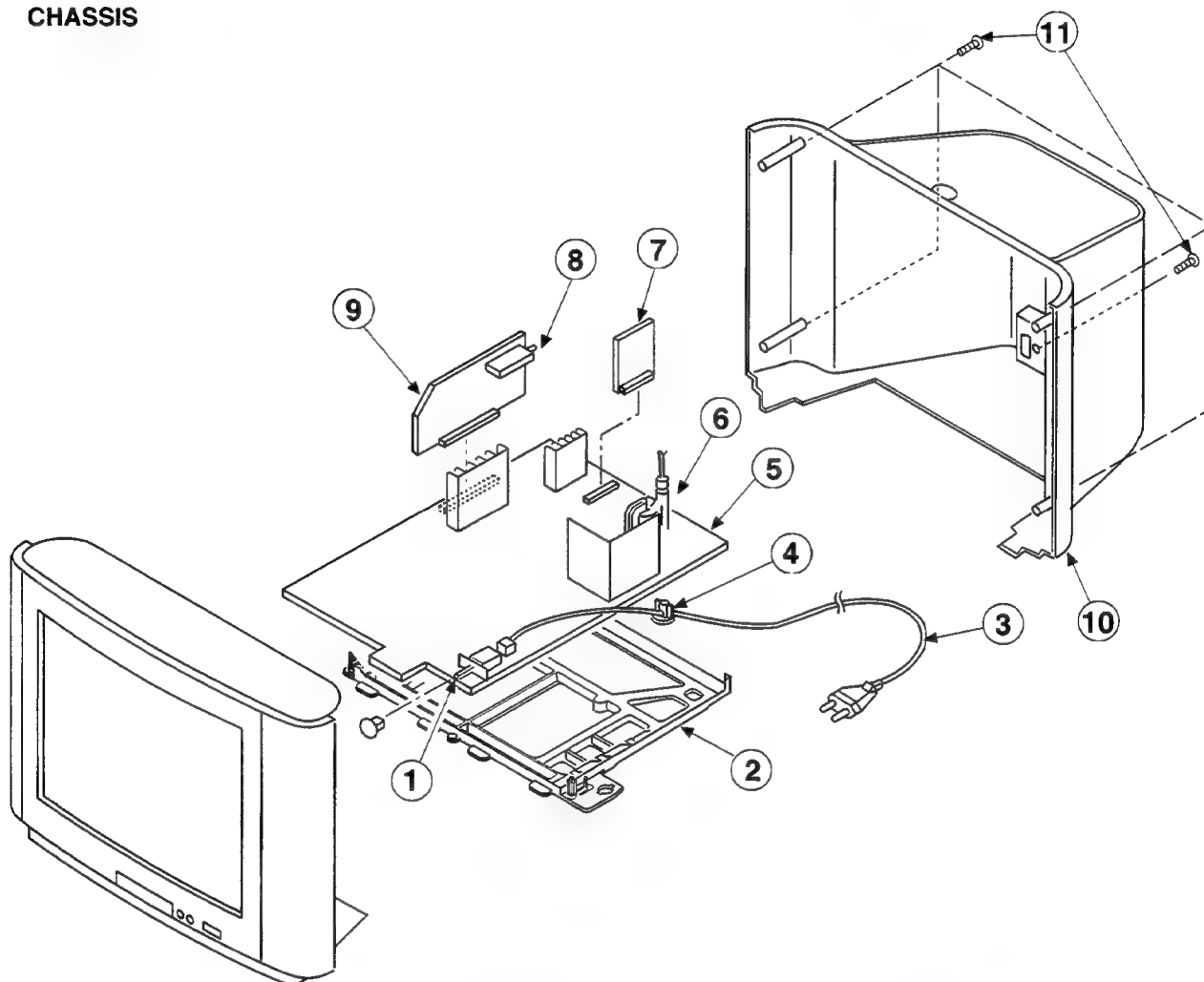
### EXPLODED VIEWS

**NOTE :**

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

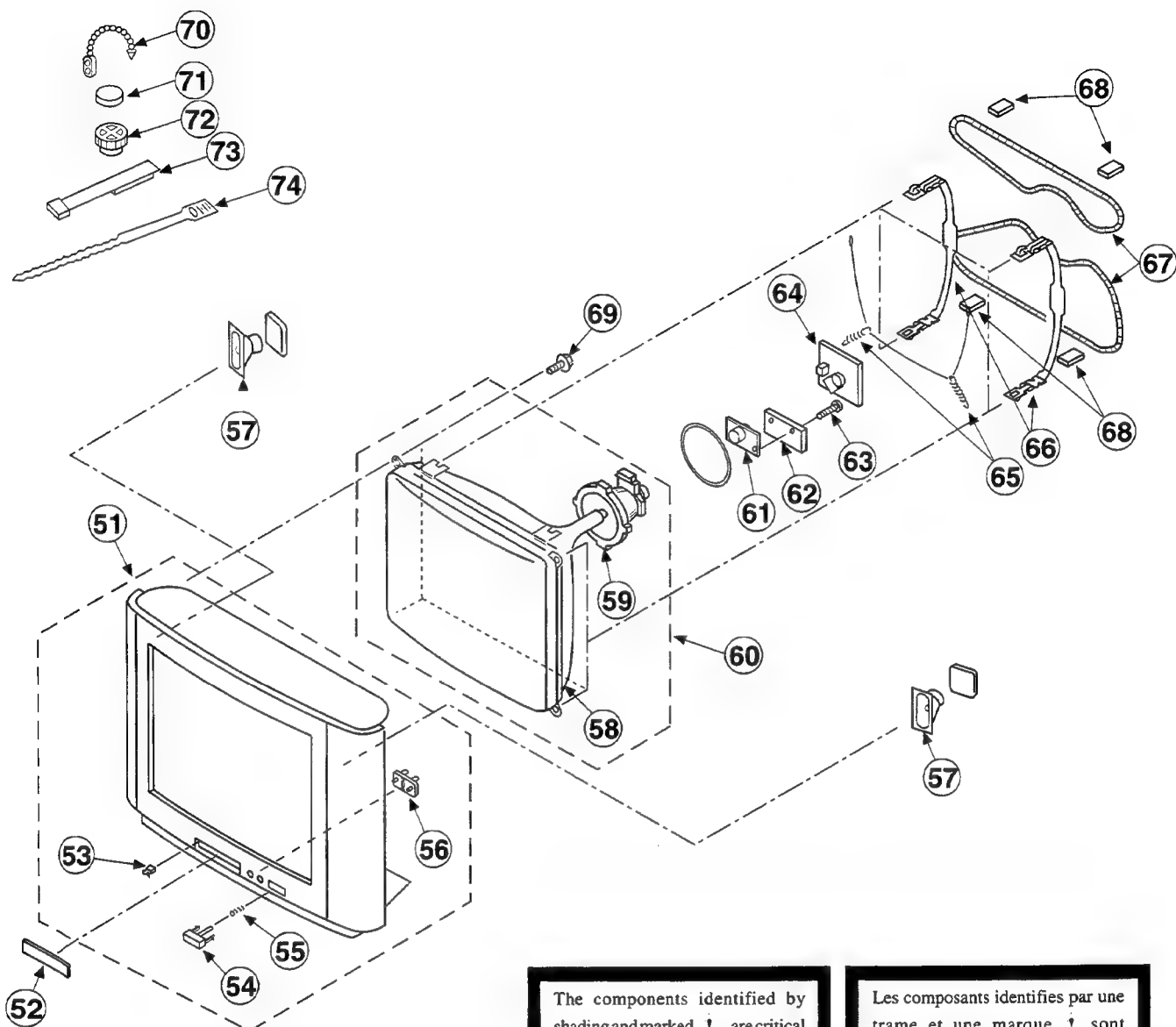
The components identified by shading and marked ! are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par une trame et une marque ! sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

**6-1. CHASSIS**

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	! 1-571-433-21	SWITCH, PUSH (AC POWER)		8	1-693-338-11	TUNER/VIF (AEP) (KV-29C1A/29C1D/29C1D 1/29C1E/29C1K/ 29C1R)	
2	*4-202-998-11	BRACKET, MAIN		9	1-693-340-11	TUNER/VIF (FR) (KV-29C1B)	
3	! 1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V (KV-29C1A/29C1D/29C1D 1)			*A-1632-423-A	A BOARD, COMPLETE (KV-29C1A)	
	! 1-690-270-21	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-29C1B/29C1E/29C1K/29C1R)			*A-1632-425-A	A BOARD, COMPLETE (KV-29C1B)	
4	! *4-202-531-01	AC CORD LOCK (SC)			*A-1632-422-A	A BOARD, COMPLETE (KV-29C1D/29C1D 1)	
5	*A-1642-165-A	D BOARD, COMPLETE (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)			*A-1632-424-A	A BOARD, COMPLETE (KV-29C1E)	
	*A-1642-188-A	D BOARD, COMPLETE (KV-29C1D 1)			*A-1632-426-A	A BOARD, COMPLETE (KV-29C1K)	
6	! 1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)		10	*A-1632-427-A	A BOARD, COMPLETE (KV-29C1R)	
7	*A-1640-214-A	D2 BOARD, COMPLETE		11	4-202-993-01	COVER, REAR	
					4-039-358-01	SCREW (4x16), (+) BV TAPPING	

## 6-2. PICTURE TUBE



The components identified by shading and marked ! are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par une trame et une marque ! sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	X-4200-253-1	BEZNET ASSY	53-56	64	*A-1638-082-A	C BOARD, COMPLETE	
52	4-203-340-01	DOOR		65	4-369-318-31	SPRING, TENSION	
53	4-392-036-01	CATCHER, PUSH		66	4-202-415-01	CLIP, DGC (29")	
		(KV-29C1A/29C1B/29C1D/29C1E/29C1K/29C1R)		67	! 1-406-807-11	COIL, DEGAUSSING	
	4-047-464-01	CATCHER, PUSH (KV-29C1D 1)		68	*4-203-390-01	CUSHION, DGC	
54	4-203-339-01	BUTTON, POWER		69	4-036-188-01	SCREW (M), PT	
55	4-202-964-01	SPRING		70	4-308-870-00	CLIP, LEAD WIRE	
56	*4-203-338-11	GUIDE, LIGHT		71	1-452-032-00	MAGNET, DISK; 10MM Ø	
57	1-504-146-11	SPEAKER (5x11CM)		72	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
58	! 8-733-856-05	! PICTURE TUBE (SD-269) (M68LCT60X)		73	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
59	! 8-451-467-11	! DEFLECTION YOKE (Y29GXA2B)		74	3-701-007-00	BAND, BINDING	
60	! 8-733-856-71	! ITC	58-59				
61	! 8-453-005-11	! NECK ASSY (NA297-M)					
62	*A-1644-070-A	VM BOARD, COMPLETE					
63	4-639-357-01	SCREW(3x8), (+) BV TAPPING					

## SECTION 7

### ELECTRICAL PARTS LIST

The components identified by shading and marked \* are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par une trame et une marque \* sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

#### RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

#### CAPACITORS

MF : mF, PF : mmF

#### COILS

MMH : mH,  $\mu$ H : mH

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1632-423-A	A BOARD, COMPLETE (KV-29C1A) *****		C120	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
	*A-1632-425-A	A BOARD, COMPLETE (KV-29C1B) *****		C121	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
	*A-1632-422-A	A BOARD, COMPLETE (KV-29C1D/29C1D 1) *****		C122	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
	*A-1632-424-A	A BOARD, COMPLETE (KV-29C1E) *****		C123	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
	*A-1632-426-A	A BOARD, COMPLETE (KV-29C1K) *****		C124	1-137-399-11	FILM 0.1MF	5% 50V
	*A-1632-427-A	A BOARD, COMPLETE (KV-29C1R) *****		C201	1-163-139-00	CERAMIC CHIP 820PF	5% 50V
	1-750-797-11	SOCKET, PLCC		C202	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
	< CAPACITOR >			C203	1-126-933-11	ELECT 100MF	20% 16V
C1	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C204	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2	1-126-965-11	ELECT 22MF	20% 50V	C205	1-126-965-11	ELECT 22MF	20% 50V
C3	1-163-104-00	CERAMIC CHIP 30PF	5% 50V	C206	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C4	1-163-104-00	CERAMIC CHIP 30PF	5% 50V	C207	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C8	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C208	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C10	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C209	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C11	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C210	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C15	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C211	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C18	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C212	1-164-346-11	CERAMIC CHIP 1MF	16V
C19	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	C213	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C20	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C214	1-164-346-11	CERAMIC CHIP 1MF	16V
C21	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C215	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C22	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C216	1-126-967-11	ELECT 47MF	20% 16V
C40	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	C217	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C41	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	C218	1-126-967-11	ELECT 47MF	20% 16V
C42	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	C219	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C43	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	C220	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C44	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	C221	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C45	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C222	1-164-346-11	CERAMIC CHIP 1MF	16V
C80	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C223	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C81	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C224	1-164-346-11	CERAMIC CHIP 1MF	16V
C82	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C225	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C90	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C226	1-126-967-11	ELECT 47MF	20% 16V
C101	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C227	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C102	1-126-934-11	ELECT 220MF	20% 16V	C228	1-126-967-11	ELECT 47MF	20% 16V
C103	1-126-965-11	ELECT 22MF	20% 50V	C229	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C104	1-163-117-00	CERAMIC CHIP 100PF	5% 50V (KV-29C1B)	C230	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C110	1-126-967-11	ELECT 47MF	20% 16V	C231	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C112	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C232	1-126-967-11	ELECT 47MF	20% 16V
C113	1-126-967-11	ELECT 47MF	20% 16V	C251	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
				C252	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
				C253	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
				C254	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
				C255	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
				C256	1-163-038-00	CERAMIC CHIP 0.1MF	25V
				C257	1-126-965-11	ELECT 22MF	20% 50V
				C258	1-126-964-11	ELECT 10MF	20% 50V

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
C259	1-164-336-11	CERAMIC CHIP 0.33MF	25V
C260	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C261	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C262	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C263	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C264	1-126-962-11	ELECT 3.3MF	20% 50V
C265	1-126-964-11	ELECT 10MF	20% 50V
C266	1-126-964-11	ELECT 10MF	20% 50V
C267	1-126-965-11	ELECT 22MF	20% 50V
C268	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C269	1-163-131-00	CERAMIC CHIP 390PF	5% 50V
C270	1-163-131-00	CERAMIC CHIP 390PF	5% 50V
C271	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C272	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C273	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C274	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C275	1-164-346-11	CERAMIC CHIP 1MF	16V
C276	1-164-346-11	CERAMIC CHIP 1MF	16V
C277	1-164-346-11	CERAMIC CHIP 1MF	16V
C278	1-164-346-11	CERAMIC CHIP 1MF	16V
C279	1-126-965-11	ELECT 22MF	20% 50V
C280	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C281	1-126-965-11	ELECT 22MF	20% 50V
C282	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C301	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C302	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C303	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C304	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C305	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C306	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C307	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C308	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C309	1-164-346-11	CERAMIC CHIP 1MF	16V
C310	1-164-346-11	CERAMIC CHIP 1MF	16V
C311	1-164-346-11	CERAMIC CHIP 1MF	16V
C312	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C313	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C315	1-216-295-00	METAL GLAZE 0	5% 1/10W
C317	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C319	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C320	1-126-965-11	ELECT 22MF	20% 50V
C321	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C322	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C323	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C324	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C325	1-164-346-11	CERAMIC CHIP 1MF	16V
C326	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C327	1-137-374-11	FILM 0.047MF	5% 50V
C328	1-126-964-11	ELECT 10MF	20% 50V
C329	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C330	1-130-777-00	FILM 0.1MF	5% 63V
C331	1-137-581-11	FILM 0.1MF	5% 100V
C332	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C333	1-126-933-11	ELECT 100MF	20% 16V
C334	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C335	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C336	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C337	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C338	1-164-346-11	CERAMIC CHIP 1MF	16V
C339	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C340	1-126-933-11	ELECT 100MF	20% 16V
C341	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C342	1-164-346-11	CERAMIC CHIP 1MF	16V
C343	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C344	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C347	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C348	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C350	1-126-964-11	ELECT 10MF	20% 50V
C351	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C352	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C353	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C354	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C355	1-126-965-11	ELECT 22MF	20% 50V
C356	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C357	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C358	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C359	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C360	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C370	1-164-505-11	CERAMIC CHIP 2.2MF	16V
		(KV-29C1B/29C1D/29C1D 1/29C1E/29C1K/29C1R)	
C371	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
C372	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
		(KV-29C1B/29C1D/29C1D 1/29C1E/29C1K/29C1R)	
C373	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
		(KV-29C1B/29C1D/29C1D 1/29C1E/29C1K/29C1R)	
C1001	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C1002	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C1010	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1014	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1020	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
< FILTER >			
CF120	1-409-327-00	TRAP, CERAMIC (6.5MHz) (KV-29C1B)	
< CONNECTOR >			
CN1	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN2	*1-568-880-51	PLUG, CONNECTOR 5P	
CN201	1-766-296-11	CONNECTOR, DUAL SCART	
CN301	*1-568-882-51	PIN, CONNECTOR 7P	
< DIODE >			
D2	8-719-988-62	DIODE 1SS355	
D10	8-719-158-15	DIODE RD5.6S-B	
D11	8-719-158-15	DIODE RD5.6S-B	
D12	8-719-158-15	DIODE RD5.6S-B	
D101	8-719-977-81	DIODE DTZ33B	
D201	8-719-977-22	DIODE DTZ9.1	
D202	8-719-977-22	DIODE DTZ9.1	
D203	8-719-977-22	DIODE DTZ9.1	
D204	8-719-977-22	DIODE DTZ9.1	
D205	8-719-977-22	DIODE DTZ9.1	
D206	8-719-977-22	DIODE DTZ9.1	
D207	8-719-977-22	DIODE DTZ9.1	
D208	8-719-977-22	DIODE DTZ9.1	
D209	8-719-977-22	DIODE DTZ9.1	
D210	8-719-977-22	DIODE DTZ9.1	
D211	8-719-977-22	DIODE DTZ9.1	



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D212	8-719-977-22	DIODE DTZ9.1		Q18	8-729-901-01	TRANSISTOR DTC144EK	
D213	8-719-977-22	DIODE DTZ9.1		Q80	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D214	8-719-977-22	DIODE DTZ9.1		Q81	8-729-216-22	TRANSISTOR 2SA1162-G	
D215	8-719-977-22	DIODE DTZ9.1		Q110	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D216	8-719-158-15	DIODE RD5.6S-B		Q111	8-729-216-22	TRANSISTOR 2SA1162-G	
D217	8-719-158-15	DIODE RD5.6S-B		Q112	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D218	8-719-158-15	DIODE RD5.6S-B		Q113	8-729-216-22	TRANSISTOR 2SA1162-G	
D220	8-719-988-62	DIODE 1SS355		Q114	8-729-216-22	TRANSISTOR 2SA1162-G	
D221	8-719-988-62	DIODE 1SS355		Q120	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D222	8-719-977-22	DIODE DTZ9.1		Q121	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-29C1B)	
D223	8-719-977-22	DIODE DTZ9.1		Q122	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D224	8-719-977-22	DIODE DTZ9.1		Q124	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-29C1B)	
D225	8-719-977-22	DIODE DTZ9.1		Q130	8-729-216-22	TRANSISTOR 2SA1162-G (KV-29C1B)	
D226	8-719-977-22	DIODE DTZ9.1		Q201	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D227	8-719-977-13	DIODE DTZ6.8C		Q202	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D251	8-719-047-16	DIODE BAS216		Q203	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D320	8-719-977-22	DIODE DTZ9.1		Q204	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D370	8-719-047-16	DIODE BAS216		Q205	8-729-901-01	TRANSISTOR DTC144EK	
		(KV-29C1B/29C1D/29C1E/29C1K/29C1R)		Q206	8-729-216-22	TRANSISTOR 2SA1162-G	
	< LINE FILTER >			Q207	8-729-216-22	TRANSISTOR 2SA1162-G	
FL101	1-236-071-11	ENCAPSULATED COMPONENT		Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
FL201	1-236-071-11	ENCAPSULATED COMPONENT		Q305	8-729-920-74	TRANSISTOR 2SC2412K-QR	
FL202	1-236-071-11	ENCAPSULATED COMPONENT		Q306	8-729-920-74	TRANSISTOR 2SC2412K-QR	
FL203	1-236-071-11	ENCAPSULATED COMPONENT		Q330	8-729-216-22	TRANSISTOR 2SA1162-G	
	< IC >			Q331	8-729-920-74	TRANSISTOR 2SC2412K-QR	
IC1	8-759-376-75	IC SDA5250M-GEG		Q332	8-729-920-74	TRANSISTOR 2SC2412K-QR	
IC2	8-759-334-20	IC ST24E32M6TR		Q1002	8-729-216-22	TRANSISTOR 2SA1162-G	
IC3	8-759-167-62	IC TMS27PC010A-15FML			< RESISTOR >		
IC4	8-759-394-57	IC PST593C-MMP-4P		JR101	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC201	8-752-076-06	IC CXA2040Q-T4		JR201	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC202	8-759-376-80	IC MSP3410-15 (KV-29C1B/29C1E)		R1	1-216-295-00	METAL GLAZE 0 5% 1/10W	
	8-759-376-56	IC MSP3400C-PS		R2	1-216-025-00	METAL GLAZE 100 5% 1/10W	
		(KV-29C1A/29C1D/29C1E/29C1K/29C1R)		R3	1-216-025-00	METAL GLAZE 100 5% 1/10W	
IC203	8-759-385-76	IC MC14052 BDR2		R4	1-216-013-00	METAL GLAZE 33 5% 1/10W	
IC301	8-752-076-09	IC CXA2000Q-TL		R5	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
IC302	8-759-288-85	IC TDA4665T-T		R7	1-216-041-00	METAL GLAZE 470 5% 1/10W	
IC303	8-759-251-56	IC TDA8395T		R8	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
		(KV-29C1B/29C1D/29C1E/29C1K/29C1R)		R9	1-216-041-00	METAL GLAZE 470 5% 1/10W	
	< COIL >			R10	1-216-041-00	METAL GLAZE 470 5% 1/10W	
L10	1-410-379-31	INDUCTOR CHIP 6.8UH		R11	1-216-041-00	METAL GLAZE 470 5% 1/10W	
L102	1-408-406-00	INDUCTOR 5.6UH (KV-29C1B)		R12	1-216-041-00	METAL GLAZE 470 5% 1/10W	
L111	1-410-993-11	INDUCTOR CHIP 1UH		R13	1-216-029-00	METAL GLAZE 150 5% 1/10W	
L120	1-408-408-00	INDUCTOR 8.2UH		R14	1-216-029-00	METAL GLAZE 150 5% 1/10W	
L121	1-408-397-00	INDUCTOR 1UH		R15	1-216-029-00	METAL GLAZE 150 5% 1/10W	
L122	1-408-408-00	INDUCTOR 8.2UH		R16	1-216-025-00	METAL GLAZE 100 5% 1/10W	
	< TRANSISTOR >			R17	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q1	8-729-920-74	TRANSISTOR 2SC2412K-QR		R18	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q4	8-729-920-74	TRANSISTOR 2SC2412K-QR		R19	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q5	8-729-920-74	TRANSISTOR 2SC2412K-QR		R20	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q10	8-729-216-22	TRANSISTOR 2SA1162-G		R21	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q11	8-729-216-22	TRANSISTOR 2SA1162-G		R24	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q12	8-729-216-22	TRANSISTOR 2SA1162-G		R25	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q15	8-729-901-01	TRANSISTOR DTC144EK		R28	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q16	8-729-901-01	TRANSISTOR DTC144EK		R29	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q17	8-729-901-01	TRANSISTOR DTC144EK		R30	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R31	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R32	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R33	1-216-025-00	METAL GLAZE 100 5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R34	1-216-025-00	METAL GLAZE	100 5% 1/10W	R106	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R35	1-216-025-00	METAL GLAZE	100 5% 1/10W	R110	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R36	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R111	1-216-029-00	METAL GLAZE	150 5% 1/10W
R37	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R112	1-216-029-00	METAL GLAZE	150 5% 1/10W
R38	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R113	1-216-001-00	METAL GLAZE	10 5% 1/10W
R39	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R114	1-216-029-00	METAL GLAZE	150 5% 1/10W
R40	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R115	1-216-037-00	METAL GLAZE	330 5% 1/10W
R42	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R116	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R44	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R117	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R46	1-216-095-00	METAL GLAZE	82K 5% 1/10W	R118	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R47	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R119	1-216-033-00	METAL GLAZE	220 5% 1/10W
R48	1-216-121-91	METAL GLAZE	1M 5% 1/10W	R120	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R49	1-216-025-00	METAL GLAZE	100 5% 1/10W	R121	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R50	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R122	1-216-041-00	METAL GLAZE	470 5% 1/10W
R51	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R123	1-216-031-00	METAL GLAZE	180 5% 1/10W
R52	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R124	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R53	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R125	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R54	1-216-025-00	METAL GLAZE	100 5% 1/10W	R126	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-29C1B)
R58	1-216-063-91	METAL GLAZE	3.9K 5% 1/10W	R127	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R59	1-216-025-00	METAL GLAZE	100 5% 1/10W	R128	1-216-035-00	METAL GLAZE	270 5% 1/10W
R60	1-216-025-00	METAL GLAZE	100 5% 1/10W	R129	1-216-037-00	METAL GLAZE	330 5% 1/10W
R61	1-216-025-00	METAL GLAZE	100 5% 1/10W	R130	1-216-073-00	METAL GLAZE	10K 5% 1/10W (KV-29C1B)
R62	1-216-025-00	METAL GLAZE	100 5% 1/10W	R131	1-216-073-00	METAL GLAZE	10K 5% 1/10W (KV-29C1B)
R63	1-216-025-00	METAL GLAZE	100 5% 1/10W	R132	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-29C1B)
R64	1-216-025-00	METAL GLAZE	100 5% 1/10W	R133	1-216-041-00	METAL GLAZE	470 5% 1/10W (KV-29C1B)
R65	1-216-025-00	METAL GLAZE	100 5% 1/10W	R134	1-216-001-00	METAL GLAZE	10 5% 1/10W (KV-29C1B)
R66	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R135	1-216-045-00	METAL GLAZE	680 5% 1/10W (KV-29C1B)
R67	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R136	1-216-033-00	METAL GLAZE	220 5% 1/10W (KV-29C1B)
R69	1-216-025-00	METAL GLAZE	100 5% 1/10W	R137	1-216-049-00	METAL GLAZE	1K 5% 1/10W (KV-29C1B)
R70	1-216-025-00	METAL GLAZE	100 5% 1/10W	R138	1-216-041-00	METAL GLAZE	470 5% 1/10W (KV-29C1B)
R71	1-216-025-00	METAL GLAZE	100 5% 1/10W	R200	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R72	1-216-025-00	METAL GLAZE	100 5% 1/10W	R201	1-216-033-00	METAL GLAZE	220 5% 1/10W
R73	1-216-025-00	METAL GLAZE	100 5% 1/10W	R202	1-216-033-00	METAL GLAZE	220 5% 1/10W
R74	1-216-025-00	METAL GLAZE	100 5% 1/10W	R203	1-216-025-00	METAL GLAZE	100 5% 1/10W
R75	1-216-025-00	METAL GLAZE	100 5% 1/10W	R204	1-216-025-00	METAL GLAZE	100 5% 1/10W
R76	1-216-025-00	METAL GLAZE	100 5% 1/10W	R205	1-216-093-00	METAL GLAZE	68K 5% 1/10W
R77	1-216-025-00	METAL GLAZE	100 5% 1/10W	R206	1-216-033-00	METAL GLAZE	220 5% 1/10W
R78	1-216-025-00	METAL GLAZE	100 5% 1/10W	R208	1-216-041-00	METAL GLAZE	470 5% 1/10W
R79	1-216-033-00	METAL GLAZE	220 5% 1/10W	R209	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R80	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R210	1-216-017-91	METAL GLAZE	47 5% 1/10W
R81	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R211	1-216-033-00	METAL GLAZE	220 5% 1/10W
R82	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R212	1-216-022-00	METAL GLAZE	75 5% 1/10W
R83	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R213	1-216-022-00	METAL GLAZE	75 5% 1/10W
R84	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R214	1-216-025-00	METAL GLAZE	100 5% 1/10W
R85	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R216	1-216-025-00	METAL GLAZE	100 5% 1/10W
R86	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R217	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R87	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R218	1-216-025-00	METAL GLAZE	100 5% 1/10W
R88	1-216-296-00	METAL GLAZE	0 5% 1/8W	R219	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R91	1-216-025-00	METAL GLAZE	100 5% 1/10W	R220	1-216-295-00	METAL GLAZE	0 5% 1/10W
R92	1-216-025-00	METAL GLAZE	100 5% 1/10W	R221	1-216-039-00	METAL GLAZE	390 5% 1/10W
R93	1-216-029-00	METAL GLAZE	150 5% 1/10W				
R94	1-216-001-00	METAL GLAZE	10 5% 1/10W				
R95	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R97	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R98	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R101	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				
R102	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R103	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R104	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R105	1-216-113-00	METAL GLAZE	470K 5% 1/10W				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R222	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R327	1-216-025-00	METAL GLAZE 100 5%	1/10W
R223	1-216-295-00	METAL GLAZE 0 5%	1/10W	R328	1-216-129-00	METAL GLAZE 2.2M 5%	1/10W
R224	1-216-039-00	METAL GLAZE 390 5%	1/10W	R329	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R225	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R330	1-216-025-00	METAL GLAZE 100 5%	1/10W
R226	1-216-033-00	METAL GLAZE 220 5%	1/10W	R331	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W
R227	1-216-022-00	METAL GLAZE 75 5%	1/10W	R312	1-216-295-00	METAL GLAZE 0 5%	1/10W
R228	1-216-022-00	METAL GLAZE 75 5%	1/10W	R313	1-216-295-00	METAL GLAZE 0 5%	1/10W
R229	1-216-033-00	METAL GLAZE 220 5%	1/10W	R314	1-216-295-00	METAL GLAZE 0 5%	1/10W
R230	1-216-022-00	METAL GLAZE 75 5%	1/10W	R332	1-216-025-00	METAL GLAZE 100 5%	1/10W
R232	1-216-025-00	METAL GLAZE 100 5%	1/10W	R333	1-216-075-00	METAL GLAZE 12K 5%	1/10W
R233	1-216-025-00	METAL GLAZE 100 5%	1/10W	R334	1-216-041-00	METAL GLAZE 470 5%	1/10W
R234	1-216-113-00	METAL GLAZE 470K 5%	1/10W	R335	1-208-806-11	METAL CHIP 10K 0.50%	1/10W
R235	1-216-025-00	METAL GLAZE 100 5%	1/10W	R336	1-216-109-00	METAL GLAZE 330K 5%	1/10W
R236	1-216-113-00	METAL GLAZE 470K 5%	1/10W	R337	1-216-025-00	METAL GLAZE 100 5%	1/10W
R237	1-216-295-00	METAL GLAZE 0 5%	1/10W	R338	1-216-051-00	METAL GLAZE 1.2K 5%	1/10W
R238	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R339	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R239	1-216-039-00	METAL GLAZE 390 5%	1/10W	R340	1-216-025-00	METAL GLAZE 100 5%	1/10W
R240	1-216-295-00	METAL GLAZE 0 5%	1/10W	R341	1-216-025-00	METAL GLAZE 100 5%	1/10W
R241	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R342	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R242	1-216-039-00	METAL GLAZE 390 5%	1/10W	R343	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R243	1-216-033-00	METAL GLAZE 220 5%	1/10W	R344	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R244	1-216-033-00	METAL GLAZE 220 5%	1/10W	R345	1-216-025-00	METAL GLAZE 100 5%	1/10W
R245	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R346	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W
R246	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W	R347	1-216-025-00	METAL GLAZE 100 5%	1/10W
R247	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W	R348	1-216-025-00	METAL GLAZE 100 5%	1/10W
R249	1-216-001-00	METAL GLAZE 10 5%	1/10W	R349	1-216-025-00	METAL GLAZE 100 5%	1/10W
R255	1-216-025-00	METAL GLAZE 100 5%	1/10W	R350	1-216-042-00	METAL GLAZE 510 5%	1/10W
R256	1-216-025-00	METAL GLAZE 100 5%	1/10W	R351	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R270	1-216-022-00	METAL GLAZE 75 5%	1/10W	R352	1-216-077-00	METAL GLAZE 15K 5%	1/10W
R271	1-216-022-00	METAL GLAZE 75 5%	1/10W	R353	1-216-033-00	METAL GLAZE 220 5%	1/10W
R272	1-216-022-00	METAL GLAZE 75 5%	1/10W	R354	1-216-033-00	METAL GLAZE 220 5%	1/10W
R273	1-216-022-00	METAL GLAZE 75 5%	1/10W	R357	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R280	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R370	1-216-295-00	METAL GLAZE 0 5%	1/10W
R281	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R1001	1-216-025-00	METAL GLAZE 100 5%	1/10W
R282	1-216-093-00	METAL GLAZE 68K 5%	1/10W	R1002	1-216-025-00	METAL GLAZE 100 5%	1/10W
R283	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1010	1-216-295-00	METAL GLAZE 0 5%	1/10W
R284	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R1012	1-216-041-00	METAL GLAZE 470 5%	1/10W
R285	1-216-093-00	METAL GLAZE 68K 5%	1/10W	R1014	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R286	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1020	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R300	1-216-025-00	METAL GLAZE 100 5%	1/10W	R1021	1-216-029-00	METAL GLAZE 150 5%	1/10W
R301	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1022	1-216-029-00	METAL GLAZE 150 5%	1/10W
R302	1-216-295-00	METAL GLAZE 0 5%	1/10W	R1023	1-216-029-00	METAL GLAZE 150 5%	1/10W
R303	1-216-295-00	METAL GLAZE 0 5%	1/10W	R1024	1-216-025-00	METAL GLAZE 100 5%	1/10W
R308	1-216-025-00	METAL GLAZE 100 5%	1/10W	R1026	1-216-025-00	METAL GLAZE 100 5%	1/10W
R309	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1027	1-216-025-00	METAL GLAZE 100 5%	1/10W
R310	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1028	1-216-025-00	METAL GLAZE 100 5%	1/10W
R311	1-216-295-00	METAL GLAZE 0 5%	1/10W	< TUNER >			
R312	1-216-295-00	METAL GLAZE 0 5%	1/10W	TU101	1-693-338-11	TUNER/VIF (AEP) (KV-29C1A/29C1D/29C1E/29C1K/ 29C1R)	
R313	1-216-295-00	METAL GLAZE 0 5%	1/10W		1-693-340-11	TUNER/VIF (FR) (KV-29C1B)	
R314	1-216-295-00	METAL GLAZE 0 5%	1/10W	< CRYSTAL >			
R315	1-216-295-00	METAL GLAZE 0 5%	1/10W	X1	1-767-120-21	VIBRATOR, CERAMIC	
R316	1-216-033-00	METAL GLAZE 220 5%	1/10W	X201	1-760-628-11	VIBRATOR, CRYSTAL 18.432MHz	
R318	1-216-689-11	METAL GLAZE 39K 5%	1/10W	X301	1-567-504-11	OSCILLATOR, CRYSTAL	
R319	1-216-081-00	METAL GLAZE 22K 5%	1/10W	X302	1-567-505-11	OSCILLATOR, CRYSTAL	
R320	1-216-025-00	METAL GLAZE 100 5%	1/10W	X303	1-767-127-11	VIBRATOR, CERAMIC	
R321	1-216-025-00	METAL GLAZE 100 5%	1/10W				
R322	1-216-025-00	METAL GLAZE 100 5%	1/10W				
R323	1-216-033-00	METAL GLAZE 220 5%	1/10W				
R324	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W				
R326	1-216-025-00	METAL GLAZE 100 5%	1/10W				



IF (KV-29C1A/29C1D/29C1E/  
29C1K/29C1R)

IF (KV-29C1B)

REF.NO.	PART NO.	DESCRIPTION	REMARK
	A-1652-037-A	IF BOARD, COMPLETE (KV-29C1A/29C1D/ ***** 29C1E/ 29C1K/29C1R)	
	< CAPACITOR >		
C01	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C02	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C03	1-104-957-11	ELECT 47MF	20% 16V
C04	1-135-259-11	TANTAL. CHIP 10MF	20% 6.3V
C05	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C06	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C08	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C09	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C10	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C11	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C15	1-124-282-00	ELECT 22MF	20% 25V
C16	1-162-638-11	CERAMIC CHIP 1MF	16V
C18	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C19	1-124-937-11	ELECT 10MF	20% 16V
	< FILTER >		
CF01	1-404-134-00	TRAP, CERAMIC (5.5MHZ)	
SWF04	1-767-084-11	FILTER, SURFACE WAVE	
	< IC >		
IC01	8-759-385-26	IC TDA4472-CFLG3	
	< COIL >		
L02	1-408-408-00	INDUCTOR 8.2UH	
L04	1-408-419-00	INDUCTOR 68UH	
L08	1-410-992-11	INDUCTOR CHIP 0.82UH	
	< VARIABLE COIL >		
LV01	1-411-874-11	COIL	
	< TRANSISTOR >		
Q01	8-729-216-22	TRANSISTOR 2SA1162-G	
	< RESISTOR >		
JR01	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR02	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR03	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR04	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR05	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR07	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R01	1-216-029-00	METAL GLAZE 150 5% 1/10W	
R02	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R03	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R04	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R05	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R06	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R07	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R08	1-216-174-00	METAL GLAZE 100 5% 1/8W	
R09	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R10	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R11	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R23	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R24	1-216-295-91	METAL GLAZE 0 5% 1/10W	

REF.NO.	PART NO.	DESCRIPTION	REMARK
R25	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R021	1-216-174-00	METAL GLAZE 100 5% 1/8W	
	< VARIABLE RESISTOR >		
RV01	1-226-703-11	RES, ADJ, METAL GLAZE 10K	
	*****		
	A-1652-036-A	IF BOARD, COMPLETE (KV-29C1B) *****	
	< CAPACITOR >		
C01	1-162-638-11	CERAMIC CHIP 1MF	16V
C02	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C03	1-104-957-11	ELECT 47MF	20% 16V
C04	1-135-259-11	TANTAL. CHIP 10MF	20% 6.3V
C05	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C06	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C08	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C09	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C10	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C11	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C12	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C13	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C14	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C15	1-104-957-11	ELECT 47MF	20% 16V
C16	1-162-638-11	CERAMIC CHIP 1MF	16V
C17	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
C18	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C20	1-124-937-11	ELECT 10MF	20% 16V
C21	1-164-506-11	CERAMIC CHIP 4.7MF	16V
	< FILTER >		
CF01	1-409-430-11	TRAP, CERAMIC	
SWF01	1-579-273-11	FILTER, SURFACE WAVE	
SWF02	1-760-329-11	FILTER, SURFACE WAVE	
SWF03	1-767-083-11	FILTER, SURFACE WAVE	
	< TRIMMER >		
CT01	1-760-662-11	TRAP, CERAMIC	
	< IC >		
IC01	8-759-069-36	IC MC74HC4046AF	
	< COIL >		
L02	1-408-406-00	INDUCTOR 5.6UH	
L04	1-408-419-00	INDUCTOR 68UH	
L05	1-410-987-11	INDUCTOR CHIP 0.33UH	
L06	1-408-399-00	INDUCTOR 1.5UH	
	< VARIABLE COIL >		
LV01	1-411-874-11	COIL	
	< TRANSISTOR >		
Q01	8-729-216-22	TRANSISTOR 2SA1162-G	
Q02	8-729-035-11	TRANSISTOR BF799-GE	
Q03	8-729-035-11	TRANSISTOR BF799-GE	
Q04	8-729-901-01	TRANSISTOR DTC144EK	

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Ne les remplacer que par une  
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for safety.  
Replace only with the part number  
specified.

KV-29C1

IF (KV-29C1B)

C

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
< RESISTOR >				< DIODE >			
JR01	1-216-296-91	METAL GLAZE 0 5%	1/8W	D701	8-719-109-72	DIODE RD3.9ES-B2	
JR02	1-216-296-91	METAL GLAZE 0 5%	1/8W	D702	8-719-991-33	DIODE 1SS133T-77	
JR03	1-216-295-00	METAL GLAZE 0 5%	1/10W	D706	8-719-991-33	DIODE 1SS133T-77	
JR04	1-216-296-91	METAL GLAZE 0 5%	1/8W	D707	8-719-991-33	DIODE 1SS133T-77	
JR05	1-216-295-00	METAL GLAZE 0 5%	1/10W	D708	8-719-991-33	DIODE 1SS133T-77	
JR07	1-216-295-00	METAL GLAZE 0 5%	1/10W	D709	8-719-991-33	DIODE 1SS133T-77	
R01	1-216-029-00	METAL GLAZE 150 5%	1/10W	D710	8-719-991-33	DIODE 1SS133T-77	
R02	1-216-089-91	METAL GLAZE 47K 5%	1/10W	D711	8-719-302-43	DIODE EL1Z	
R03	1-216-089-91	METAL GLAZE 47K 5%	1/10W	D714	8-719-991-33	DIODE 1SS133T-77	
R04	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	D715	8-719-991-33	DIODE 1SS133T-77	
R05	1-216-081-00	METAL GLAZE 22K 5%	1/10W	D716	8-719-991-33	DIODE 1SS133T-77	
R06	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	D717	8-719-991-33	DIODE 1SS133T-77	
R07	1-216-025-91	METAL GLAZE 100 5%	1/10W	D718	8-719-991-33	DIODE 1SS133T-77	
R08	1-216-174-00	METAL GLAZE 100 5%	1/8W	D719	8-719-991-33	DIODE 1SS133T-77	
R09	1-216-045-00	METAL GLAZE 680 5%	1/10W	D720	8-719-991-33	DIODE 1SS133T-77	
R10	1-216-041-00	METAL GLAZE 470 5%	1/10W	< CRT SOCKET >			
R11	1-216-051-00	METAL GLAZE 1.2K 5%	1/10W	J701	1-526-990-22	SOCKET, CRT	
R12	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W	< COIL >			
R13	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	L704	1-408-609-41	INDUCTOR 33UH	
R14	1-216-023-00	METAL GLAZE 82 5%	1/10W	< TRANSISTOR >			
R15	1-216-017-91	METAL GLAZE 47 5%	1/10W	Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R16	1-216-033-00	METAL GLAZE 220 5%	1/10W	Q703	8-729-906-70	TRANSISTOR BF871-127	
R17	1-216-017-91	METAL GLAZE 47 5%	1/10W	Q704	8-729-200-17	TRANSISTOR 2SA1091-0	
R18	1-216-013-00	METAL GLAZE 33 5%	1/10W	Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R20	1-216-222-00	METAL GLAZE 10K 5%	1/8W	Q706	8-729-906-70	TRANSISTOR BF871-127	
R23	1-216-049-91	METAL GLAZE 1K 5%	1/10W	Q707	8-729-200-17	TRANSISTOR 2SA1091-0	
R25	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R21	1-216-174-00	METAL GLAZE 100 5%	1/8W	Q709	8-729-906-70	TRANSISTOR BF871-127	
< VARIABLE RESISTOR >				Q710	8-729-200-17	TRANSISTOR 2SA1091-0	
RV01	1-226-703-11	RES, ADJ, METAL GLAZE 10K		Q711	8-729-173-38	TRANSISTOR 2SA733-K	
RV02	1-226-703-11	RES, ADJ, METAL GLAZE 10K		< RESISTOR >			
*****				R704	1-216-486-00	METAL OXIDE 8.2K 5%	3W F
*A-1638-082-A C BOARD, COMPLETE				R705	1-202-822-00	SOLID 2.2K 10%	1/2W
*****				R706	1-247-815-91	CARBON 220 5%	1/4W
< CAPACITOR >				R707	1-249-407-11	CARBON 150 5%	1/4W
C702	1-102-115-00	CERAMIC 560PF 10%	50V	R709	1-202-844-00	SOLID 330K 10%	1/2W
C703	1-102-116-00	CERAMIC 680PF 10%	50V	R711	1-249-420-11	CARBON 1.8K 5%	1/4W
C708	1-162-114-00	CERAMIC 0.0047MF 2KV		R712	1-202-822-00	SOLID 2.2K 10%	1/2W
C710	1-107-652-11	ELECT 10MF 20%	250V	R714	1-216-486-00	METAL OXIDE 8.2K 5%	3W F
C712	1-102-116-00	CERAMIC 680PF 10%	50V	R715	1-249-417-11	CARBON 1K 5%	1/4W
C714	1-126-967-11	ELECT 47MF 20%	16V	R716	1-247-815-91	CARBON 220 5%	1/4W
C717	1-102-114-00	CERAMIC 470PF 10%	50V	R717	1-249-407-11	CARBON 150 5%	1/4W
C718	1-102-114-00	CERAMIC 470PF 10%	50V	R718	1-202-814-11	SOLID 33K 10%	1/2W
C719	1-102-114-00	CERAMIC 470PF 10%	50V	R720	1-249-420-11	CARBON 1.8K 5%	1/4W
C722	1-101-880-00	CERAMIC 47PF 5%	50V	R722	1-202-848-00	SOLID 680K 10%	1/2W
C723	1-101-880-00	CERAMIC 47PF 5%	50V	R723	1-249-417-11	CARBON 1K 5%	1/4W
C724	1-101-880-00	CERAMIC 47PF 5%	50V	R724	1-202-846-00	SOLID 470K 10%	1/2W
< CONNECTOR >				R726	1-202-822-00	SOLID 2.2K 10%	1/2W
CN701	1-778-037-11	PIN, CONNECTOR 6P		R727	1-247-815-91	CARBON 220 5%	1/4W
CN702	1-695-915-11	TAB (CONTACT)		R728	1-216-350-11	METAL OXIDE 1.2 5%	1W F
CN703	*1-568-882-51	PIN, CONNECTOR 7P		R729	1-249-407-11	CARBON 150 5%	1/4W
				R731	1-249-420-11	CARBON 1.8K 5%	1/4W
				R733	1-249-417-11	CARBON 1K 5%	1/4W
				R734	1-247-807-31	CARBON 100 5%	1/4W
				R735	1-249-417-11	CARBON 1K 5%	1/4W

**C** **D2** **D**

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R736	1-216-486-00	METAL OXIDE 8.2K 5% 3W F		C503	1-136-165-00	FILM 0.1MF 5% 50V	
R739	1-249-417-11	CARBON 1K 5% 1/4W		C504	1-102-824-00	CERAMIC 470PF 5% 50V	
R740	1-249-417-11	CARBON 1K 5% 1/4W		C506	1-126-941-11	ELECT 470MF 20% 25V	
R741	1-202-549-00	SOLID 100 20% 1/2W		C507	1-109-953-11	ELECT 2.2MF 20% 50V	
R744	1-249-421-11	CARBON 2.2K 5% 1/4W		C509	1-136-165-00	FILM 0.1MF 5% 50V	
R745	1-249-421-11	CARBON 2.2K 5% 1/4W		C510	1-126-969-11	ELECT 220MF 20% 50V	
R746	1-249-421-11	CARBON 2.2K 5% 1/4W		C511	1-136-202-11	FILM 0.33MF 5% 63V	
R747	1-249-437-11	CARBON 47K 5% 1/4W		C513	1-106-220-00	MYLAR 0.1MF 10% 100V	
R748	1-249-417-11	CARBON 1K 5% 1/4W		C514	1-136-165-00	FILM 0.1MF 5% 50V	
R749	1-249-435-11	CARBON 33K 5% 1/4W		C515	1-126-941-11	ELECT 470MF 20% 25V	
< VARIABLE RESISTOR >				C517	1-126-941-11	ELECT 470MF 20% 25V	
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M		C518	1-102-228-00	CERAMIC 470PF 10% 500V	
RV702	1-241-655-21	RES, ADJ, METAL FILM 110M		C519	1-102-228-00	CERAMIC 470PF 10% 500V	
*****				C520	1-126-941-11	ELECT 470MF 20% 25V	
*A-1640-214-A D2 BOARD, COMPLETE				C521	1-124-006-11	ELECT 10MF 20% 25V	
*****				C522	1-126-964-11	ELECT 10MF 20% 50V	
< CAPACITOR >				C523	1-136-165-00	FILM 0.1MF 5% 50V	
C1801	1-126-967-11	ELECT 47MF 20% 50V		C600	1-113-890-51	CERAMIC 0.0022MF 20% 250V	
C1803	1-137-368-11	FILM 0.0047MF 5% 50V		C601	1-161-964-91	CERAMIC 0.0047MF 250V	
C1804	1-126-964-11	ELECT 10MF 20% 50V		C602	1-161-964-91	CERAMIC 0.0047MF 250V	
C1807	1-137-366-11	FILM 0.0022MF 5% 50V		C603	1-125-555-11	ELECT 330MF 20% 400V	
< CONNECTOR >				C604	1-126-968-11	ELECT 100MF 20% 50V	
CN1801	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P		C605	1-107-929-11	ELECT 10MF 20% 100V	
CN1803	*1-568-878-51	PIN, CONNECTOR 3P		C606	1-162-318-11	CERAMIC 0.001MF 10% 500V	
< DIODE >				C607	1-104-666-11	ELECT 220MF 20% 25V	
D1802	8-719-110-17	DIODE RD10ESB2		C608	1-109-880-11	FILM 0.0015MF 3% 2KV	
< IC >				C611	1-102-228-00	CERAMIC 470PF 10% 500V	
IC1801	8-759-701-59	IC NJM78M09FA		C612	1-111-160-91	ELECT 22MF 20% 100V	
IC1802	8-759-603-37	IC M5216P		C613	1-124-347-00	ELECT 100MF 20% 160V	
< LINK IC >				C614	1-128-526-11	ELECT 100MF 20% 25V	
JW1802	1-532-605-91	LINK, IC (0.4A)		C615	1-111-067-11	ELECT 0.001MF 20% 25V	
< RESISTOR >				C616	1-111-067-11	ELECT 0.001MF 20% 25V	
R1802	1-249-426-11	CARBON 5.6K 5% 1/4W		C617	1-128-339-51	ELECT 2200MF 20% 16V	
R1807	1-247-883-00	CARBON 150K 5% 1/4W		C618	1-136-165-00	FILM 0.1MF 5% 50V	
R1809	1-249-429-11	CARBON 10K 5% 1/4W		C619	1-102-228-00	CERAMIC 470PF 10% 500V	
R1810	1-249-429-11	CARBON 10K 5% 1/4W		C620	1-102-228-00	CERAMIC 470PF 10% 500V	
R1811	1-249-429-11	CARBON 10K 5% 1/4W		C621	1-136-165-00	FILM 0.1MF 5% 50V	
R1812	1-249-429-11	CARBON 10K 5% 1/4W		C622	1-107-925-11	ELECT 1MF 20% 100V	
*****				C623	1-104-666-11	ELECT 220MF 20% 25V	
*A-1642-165-A D BOARD, COMPLETE (KV-29C1A/29C1B/				C624	1-136-165-00	FILM 0.1MF 5% 50V	
***** 29C1D/29C1E/				C625	1-126-967-11	ELECT 47MF 20% 50V	
*A-1642-188-A D BOARD, COMPLETE (KV-29C1D 1)				C626	1-104-666-11	ELECT 220MF 20% 25V	
***** 29C1K/29C1R)				C628	1-126-964-11	ELECT 10MF 20% 50V	
4-201-023-11 SPACER, INSULATING				C629	1-111-097-11	ELECT 2200MF 20% 35V	
4-202-373-01 SPRING, IC				C630	1-111-097-11	ELECT 2200MF 20% 35V	
< CAPACITOR >				C631	1-126-965-11	ELECT 22MF 20% 50V	
C502	1-102-824-00	CERAMIC 470PF 5% 50V		C633	1-107-564-11	FILM 0.22MF 20% 300V	
*****				C634	1-107-564-11	FILM 0.22MF 20% 300V	
*****				C635	1-107-564-11	FILM 0.22MF 20% 300V	
*****				C636	1-113-890-51	CERAMIC 0.0022MF 20% 250V	
*****				C638	1-136-203-11	FILM 0.01MF 5% 630V	
*****				C640	1-106-220-00	MYLAR 0.1MF 10% 100V	
*****				C644	1-137-043-11	FILM 0.0047MF 10% 400V	
*****				C647	1-162-116-00	CERAMIC 680PF 10% 2KV	
*****				C651	1-102-228-00	CERAMIC 470PF 10% 500V	
*****				C800	1-137-368-11	FILM 0.0047MF 5% 50V	
*****				C801	1-137-372-11	FILM 0.022MF 5% 50V	
*****				C802	1-136-161-00	FILM 0.047MF 5% 50V	
*****				C804	1-136-165-00	FILM 0.1MF 5% 50V	
*****				C805	1-136-207-11	FILM 0.047MF 10% 250V	

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KV-29C1

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C806	1-104-999-11	MYLAR	0.1MF 10% 200V	C1218	1-126-934-11	ELECT 220MF 20% 16V	
C807	1-136-109-00	FILM	0.68MF 5% 200V			< CONNECTOR >	
C808	1-137-205-11	FILM	0.1MF 5% 400V	CN600	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
C810	1-107-683-11	ELECT	2.2MF 250V	CN601	1-508-765-11	PIN, CONNECTOR (5MM PITCH) 3P	
C811	1-102-212-00	CERAMIC	820PF 10% 500V	CN603	*1-580-844-11	PIN, CONNECTOR (POWER)	
C812	1-136-125-00	FILM	0.68MF 5% 400V	CN800	*1-580-798-11	CONNECTOR PIN (DY) 6P	
C813	1-129-722-00	FILM	0.047MF 10% 630V	CN801	*1-573-296-21	CONNECTOR, BOARD TO BOARD 10P	
C814	1-136-565-11	FILM	0.015MF 3% 1.4KV				
C815	1-136-562-11	MYLAR	0.0082MF 10% 400V	CN803	1-695-915-11	TAB (CONTACT)	
C816	1-161-754-00	CERAMIC	0.001MF 10% 2KV	CN804	1-778-037-11	PIN, CONNECTOR 6P	
C817	1-161-754-00	CERAMIC	0.001MF 10% 2KV	CN807	1-568-878-51	PIN, CONNECTOR 3P	
C818	1-162-134-11	CERAMIC	470PF 10% 2KV	CN900	1-568-678-11	TERMINAL BLOCK, S 3P	
C819	1-136-208-11	FILM	0.068MF 10% 250V			(KV-29C1A/29C1B/29C1D/29C1E/29C1K/29C1R)	
C820	1-102-114-00	CERAMIC	470PF 10% 50V	CN902	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
C821	1-162-114-00	CERAMIC	0.0047MF 2KV	CN1401	*1-568-880-51	PIN, CONNECTOR 5P	
C822	1-107-662-11	ELECT	22MF 20% 250V	CN1408	*1-568-879-11	PIN, CONNECTOR 4P	
C824	1-123-024-21	ELECT	33MF 160V	CN1420	1-568-878-51	PIN, CONNECTOR 3P	
C829	1-124-902-00	ELECT	0.47MF 20% 50V			< DIODE >	
C830	1-124-902-00	ELECT	0.47MF 20% 50V	D500	8-719-109-85	DIODE RD5.1ES-B2	
C832	1-124-903-11	ELECT	1MF 20% 50V	D502	8-719-979-85	DIODE EGP20G	
C834	1-128-551-11	ELECT	22MF 20% 25V	D503	8-719-979-85	DIODE EGP20G	
C835	1-162-318-11	CERAMIC	0.001MF 10% 500V	D504	8-719-991-33	DIODE 1SS133T-77	
C836	1-162-117-00	CERAMIC	100PF 10% 500V	D505	8-719-982-03	DIODE MTZJ-3.6A	
C838	1-102-228-00	CERAMIC	470PF 10% 500V	D506	8-719-991-33	DIODE 1SS133T-77	
C839	1-136-189-00	FILM	0.1MF 10% 250V	D507	8-719-109-85	DIODE RD5.1ES-B2	
C845	1-102-110-00	CERAMIC	220PF 10% 50V	D600	8-719-510-53	DIODE D4SB60L	
C901	1-101-810-00	CERAMIC	100PF 5% 500V	D601	8-719-046-77	DIODE EMI-V1	
		(KV-29C1A/29C1B/29C1D/29C1E/29C1K/29C1R)		D603	8-719-109-97	DIODE RD6.8ES-B2	
C902	1-137-372-11	FILM	0.022MF 5% 50V	D604	8-719-046-75	DIODE EU-1-V1	
C903	1-137-372-11	FILM	0.022MF 5% 50V	D605	8-719-302-43	DIODE EL1Z	
C904	1-104-665-11	ELECT	100MF 20% 25V	D606	8-719-302-43	DIODE EL1Z	
C905	1-126-964-11	ELECT	10MF 20% 50V	D607	8-719-046-78	DIODE EG-1Z-V1	
C906	1-126-964-11	ELECT	10MF 20% 50V	D608	8-719-312-94	DIODE EU2-V1	
		(KV-29C1A/29C1B/29C1D/29C1E/29C1K/29C1R)		D609	8-719-301-64	DIODE RU4DS	
C907	1-126-964-11	ELECT	10MF 20% 50V	D610	8-719-046-74	DIODE AU-01Z-V1	
		(KV-29C1A/29C1B/29C1D/29C1E/29C1K/29C1R)		D611	8-719-045-48	DIODE FML-G12S	
C908	1-126-964-11	ELECT	10MF 20% 50V	D612	8-719-046-76	DIODE RU3YX-V1	
		(KV-29C1A/29C1B/29C1D/29C1E/29C1K/29C1R)		D613	8-719-045-48	DIODE FML-G12S	
C911	1-126-964-11	ELECT	10MF 20% 50V	D614	8-719-045-48	DIODE FML-G12S	
C913	1-101-810-00	CERAMIC	100PF 5% 500V	D615	8-719-046-75	DIODE EU-1-V1	
		(KV-29C1A/29C1B/29C1D/29C1E/29C1K/29C1R)		D616	8-719-110-03	DIODE RD7.5ESB2	
C1200	1-136-165-00	FILM	0.1MF 5% 50V	D617	8-719-991-33	DIODE 1SS133T-77	
C1201	1-136-173-00	FILM	0.47MF 5% 50V	D618	8-719-991-33	DIODE 1SS133T-77	
C1202	1-136-173-00	FILM	0.47MF 5% 50V	D619	8-719-991-33	DIODE 1SS133T-77	
C1203	1-136-169-00	FILM	0.22MF 5% 50V	D620	8-719-991-33	DIODE 1SS133T-77	
C1204	1-136-169-00	FILM	0.22MF 5% 50V	D622	8-719-923-60	DIODE MTZJ-T-77-9.1A	
C1205	1-101-005-00	CERAMIC	0.022MF 50V	D625	8-719-991-33	DIODE 1SS133T-77	
C1206	1-101-005-00	CERAMIC	0.022MF 50V	D626	8-719-046-74	DIODE AU-01Z-V1	
C1207	1-126-933-11	ELECT	100MF 20% 16V	D631	8-719-109-93	DIODE RD6.2ES-B2	
C1208	1-126-963-11	ELECT	4.7MF 20% 50V	D800	8-719-991-33	DIODE 1SS133T-77	
C1209	1-126-963-11	ELECT	4.7MF 20% 50V	D801	8-719-991-33	DIODE 1SS133T-77	
C1214	1-126-933-11	ELECT	100MF 20% 16V	D802	8-719-991-33	DIODE 1SS133T-77	
C1215	1-136-173-00	FILM	0.47MF 5% 50V	D803	8-719-908-03	DIODE GP08D	
C1216	1-137-366-11	FILM	0.0022MF 5% 50V	D807	8-719-302-43	DIODE EL1Z	
C1217	1-137-366-11	FILM	0.0022MF 5% 50V	D808	8-719-908-03	DIODE GP08D	
				D809	8-719-018-82	DIODE RGP02-20EL-6394	
				D810	8-719-302-43	DIODE EL1Z	
				D812	8-719-038-49	DIODE FMS-3FU-LF027-1	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D815	8-719-908-03	DIODE GP08D		L615	1-412-529-11	INDUCTOR 22UH	
D817	8-719-109-89	DIODE RD5.6ESB2		L616	1-412-533-21	INDUCTOR 47UH	
D901	8-719-030-11	DIODE SLA-570KT3F (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)		L801	1-459-111-00	COIL, DRAM CORE (CDI)	
				L802	1-459-104-00	COIL, WITH CORE	
D902	8-719-923-60	DIODE MTZJ-T-77-9.1A (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)		L803	1-420-872-00	COIL, AIR-CORE	
				L804	1-406-903-11	COIL, HORIZONTAL LINEARITY	
D903	8-719-923-60	DIODE MTZJ-T-77-9.1A (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)		L805	1-406-675-11	COIL, CHOKE 4.7MMH	
				L809	1-412-533-21	INDUCTOR 47UH	
D904	8-719-923-60	DIODE MTZJ-T-77-9.1A (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)		L811	1-406-979-11	COIL, CHOKE 220UH	
				L813	1-412-552-21	INDUCTOR 2.2MMH	
D905	8-719-923-60	DIODE MTZJ-T-77-9.1A (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)		L901	1-408-603-31	INDUCTOR 10UH	
				L902	1-408-603-31	INDUCTOR 10UH	
D906	8-719-923-60	DIODE MTZJ-T-77-9.1A (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)		L903	1-408-409-00	INDUCTOR 10UH (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)	
D1201	8-719-109-72	DIODE RD3.9ES-B2		L904	1-408-409-00	INDUCTOR 10UH (KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)	
		< FUSE >				< IC LINK >	
F601	$\Delta$ 1-576-232-21	FUSE (H.B.C.) 5A/250V		PS600	$\Delta$ 1-532-686-91	LINK, IC 2.7A (ICP-F75)	
	$\Delta$ 1-533-230-11	HOLDER, FUSE ;F601		PS601	$\Delta$ 1-532-686-91	LINK, IC 2.7A (ICP-F75)	
		< FERRITE BEAD >		PS602	$\Delta$ 1-532-686-91	LINK, IC 2.7A (ICP-F75)	
FB600	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		PS603	$\Delta$ 1-532-686-91	LINK, IC 2.7A (ICP-F75)	
FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH				< TRANSISTOR >	
FB602	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		Q503	8-729-900-89	TRANSISTOR DTC144ES	
				Q601	8-729-025-04	TRANSISTOR 2SC3852A	
FB606	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		Q602	8-729-320-28	TRANSISTOR 2SA1667	
FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		Q603	8-729-802-78	TRANSISTOR 2SC3502-E	
FB608	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		Q604	8-729-024-35	TRANSISTOR 2SC2808STP-R	
FB800	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		< IC >		Q606	8-729-900-65	TRANSISTOR DTA144ES	
IC500	8-759-192-71	IC STV9379		Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE	
IC600	8-749-010-84	IC STR-S6708		Q800	8-729-119-78	TRANSISTOR 2SC2785-HFE	
IC601	$\Delta$ 8-749-924-92	IC TLP721(D4-)		Q801	8-729-017-06	TRANSISTOR 2SC4793	
IC602	8-749-920-61	IC SE135N		Q802	8-729-016-32	TRANSISTOR 2SC4927-01	
IC603	8-759-144-82	IC $\mu$ PC2405HF		Q803	8-729-119-80	TRANSISTOR 2SC2688-LK	
IC604	8-759-510-52	IC L4941BV		Q805	8-729-900-89	TRANSISTOR DTC144ES	
IC606	8-759-267-25	IC LM2940T-9.0		Q900	8-729-119-78	TRANSISTOR 2SC2785-HFE	
IC800	8-759-103-93	IC $\mu$ PC393C		Q1200	8-729-119-78	TRANSISTOR 2SC2785-HFE	
IC900	8-747-905-11	RAY CATCHER ELEMENT SBX1790-51		Q1201	8-729-900-74	TRANSISTOR DTC143TS	
IC1200	8-759-250-68	IC TDA7264		Q1202	8-729-900-80	TRANSISTOR DTC114ES	
IC1201	8-759-502-21	IC TDA2822M		Q1203	8-729-900-74	TRANSISTOR DTC143TS	
		< JACK SOCKET >		Q1204	8-729-900-74	TRANSISTOR DTC143TS	
J900	1-764-606-11	JACK				< RESISTOR >	
		< COIL >		R500	1-215-457-00	METAL 33K 1% 1/4W	
L502	1-412-519-11	INDUCTOR 3.3UH		R502	1-249-421-11	CARBON 2.2K 5% 1/4W	
L503	1-412-519-11	INDUCTOR 3.3UH		R503	1-249-429-11	CARBON 10K 5% 1/4W	
L609	1-412-533-21	INDUCTOR 47UH		R504	1-215-455-00	METAL 27K 1% 1/4W	
L611	1-412-527-11	INDUCTOR 15UH		R505	1-249-382-11	CARBON 1.2 5% 1/4W F	
L612	1-412-522-41	INDUCTOR 5.6UH		R506	1-215-439-00	METAL 5.6K 1% 1/4W	
L613	1-412-522-41	INDUCTOR 5.6UH		R507	1-215-888-00	METAL OXIDE 220 5% 2W F	
				R508	1-216-371-00	METAL OXIDE 1.5 5% 2W F	
				R509	1-249-443-11	CARBON 0.47 5% 1/4W F	
				R510	1-249-443-11	CARBON 0.47 5% 1/4W F	
				R520	1-215-457-00	METAL 33K 1% 1/4W	

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R521	1-215-455-00	METAL	27K 1% 1/4W	R818	1-215-882-00	METAL OXIDE	22 5% 2W F
R522	1-247-863-91	CARBON	22K 5% 1/4W	R819	1-216-345-11	METAL OXIDE	0.47 5% 1W F
R523	1-247-863-91	CARBON	22K 5% 1/4W	R820	1-249-403-11	CARBON	68 5% 1/4W
R524	1-249-425-11	CARBON	4.7K 5% 1/4W	R821	1-215-909-11	METAL OXIDE	47 5% 3W F
R525	1-249-425-11	CARBON	4.7K 5% 1/4W	R822	1-215-868-00	METAL OXIDE	680 5% 1W F
R526	1-249-421-11	CARBON	2.2K 5% 1/4W	R824	1-249-420-11	CARBON	1.8K 5% 1/4W
R527	1-215-437-00	METAL	4.7K 1% 1/4W	R826	1-247-752-11	CARBON	1K 5% 1/2W
R600	1-216-490-11	METAL OXIDE	39K 5% 3W F	R827	1-249-425-11	CARBON	4.7K 5% 1/4W
R601	1-249-417-11	CARBON	1K 5% 1/4W	R828	1-249-430-11	CARBON	12K 5% 1/4W
R602	1-215-473-00	FILM	150K 15 1/4W	R829	1-249-493-11	CARBON	56K 5% 1/2W
R603	1-215-898-11	METAL OXIDE	10K 5% 2W F	R830	1-217-778-11	FUSIBLE	1K 5% 1W F
R604	1-249-420-11	CARBON	1.8K 5% 1/4W	R833	1-247-887-00	CARBON	220K 5% 1/4W
R605	1-216-362-11	METAL OXIDE	0.27 5% 2W F	R835	1-216-471-11	METAL OXIDE	27 5% 3W F
R607	1-216-421-11	METAL OXIDE	12 5% 1W F	R836	1-249-439-11	CARBON	68K 5% 1/4W
R608	1-216-365-00	METAL OXIDE	0.47 5% 2W F	R837	1-249-427-11	CARBON	6.8K 5% 1/4W
R610	1-215-421-00	METAL	1K 1% 1/4W	R840	1-247-807-31	CARBON	100 5% 1/4W
R611	1-216-354-11	METAL OXIDE	2.7 5% 1W F	R841	1-249-418-11	CARBON	1.2K 5% 1/4W
R612	1-249-428-11	CARBON	8.2K 5% 1/4W	R842	1-249-441-11	CARBON	100K 5% 1/4W F
R613	1-249-417-11	CARBON	1K 5% 1/4W	R843	1-249-441-11	CARBON	100K 5% 1/4W F
R614	1-215-877-11	METAL OXIDE	22K 5% 1W F	R846	1-247-885-91	CARBON	180K 5% 1/4W
R615	1-249-435-11	CARBON	33K 5% 1/4W	R847	1-247-895-91	CARBON	470K 5% 1/4W
R616	1-215-471-00	METAL	120K 1% 1/4W	R848	1-249-863-91	CARBON	22K 5% 1/4W
R617	1-215-901-00	METAL OXIDE	33K 5% 2W F	R849	1-249-429-11	CARBON	10K 5% 1/4W
R618	1-247-863-91	CARBON	22K 5% 1/4W	R850	1-249-425-11	CARBON	4.7K 5% 1/4W
R619	1-216-425-11	METAL OXIDE	56 5% 1W F	R851	1-215-898-11	METAL OXIDE	10K 5% 2W F
R620	1-260-131-11	CARBON	470K 5% 1/2W	R852	1-249-432-11	CARBON	18K 5% 1/4W
R621	1-216-425-11	METAL OXIDE	56 5% 1W F	R900	1-247-815-91	CARBON	220 5% 1/4W
R622	1-249-437-11	CARBON	47K 5% 1/4W	R901	1-247-734-11	CARBON	39 5% 1/2W
R623	1-249-429-11	CARBON	10K 5% 1/4W	R902	1-247-734-11	CARBON	39 5% 1/2W
R624	1-249-393-11	CARBON	10 5% 1/4W F	R904	1-249-389-11	CARBON	4.7 5% 1/4W F
R625	1-249-434-11	CARBON	27K 5% 1/4W	R905	1-247-804-11	CARBON	75 5% 1/4W
R626	1-249-430-11	CARBON	12K 5% 1/4W			(KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)	
R627	1-216-347-11	METAL OXIDE	0.68 5% 1W F	R906	1-247-804-11	CARBON	75 5% 1/4W
R628	1-249-415-11	CARBON	680 5% 1/4W F			(KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)	
R629 $\Delta$	1-244-945-91	CARBON	1M 5% 1/2W	R907	1-247-804-11	CARBON	75 5% 1/4W
R630 $\Delta$	1-218-265-21	METAL	8.2M 5% 1W			(KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)	
R631 $\Delta$	1-205-949-11	WIREWOUND	1.8 5% 10W	R908	1-249-401-11	CARBON	47 5% 1/4W
R632	1-247-807-31	CARBON	100 5% 1/4W	R909	1-249-429-11	CARBON	10K 5% 1/4W
R633	1-247-807-31	CARBON	100 5% 1/4W	R910	1-249-422-11	CARBON	2.7K 5% 1/4W
R634	1-249-397-11	CARBON	22 5% 1/4W F	R911	1-249-426-11	CARBON	5.6K 5% 1/4W
R635	1-249-437-11	CARBON	47K 5% 1/4W	R912	1-249-429-11	CARBON	10K 5% 1/4W
R636	1-249-417-11	CARBON	1K 5% 1/4W	R913	1-247-863-91	CARBON	22K 5% 1/4W
R637	1-247-815-91	CARBON	220 5% 1/4W	R914	1-249-437-11	CARBON	47K 5% 1/4W
R638	1-247-863-91	CARBON	22K 5% 1/4W	R919	1-249-437-11	CARBON	47K 5% 1/4W
R639	1-215-439-00	METAL	5.6K 1% 1/4W			(KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)	
R642 $\Delta$	1-205-949-11	WIREWOUND	1.8 5% 10W	R921	1-249-437-11	CARBON	47K 5% 1/4W
R645	1-249-422-11	CARBON	2.7K 5% 1/4W	R922	1-247-807-31	CARBON	100 5% 1/4W
R646	1-249-377-11	CARBON	0.47 5% 1/4W F	R923	1-249-412-11	CARBON	390 5% 1/4W
R647	1-202-933-61	FUSIBLE	0.1 10% 1/2W F			(KV-29C1A/29C1B/29C1D/29C1E/29C1K/ 29C1R)	
R649	1-249-426-11	CARBON	5.6K 5% 1/4W F	R1200	1-249-425-11	CARBON	4.7K 5% 1/4W
R800	1-249-421-11	CARBON	2.2K 5% 1/4W	R1201	1-249-434-11	CARBON	27K 5% 1/4W
R802	1-249-431-11	CARBON	22K 5% 1/4W	R1202	1-249-393-11	CARBON	10 5% 1/4W F
R803	1-249-424-11	CARBON	3.9K 5% 1/4W	R1203	1-249-421-11	CARBON	2.2K 5% 1/4W
R805	1-249-429-11	CARBON	10K 5% 1/4W	R1204	1-249-421-11	CARBON	2.2K 5% 1/4W
R809	1-247-891-00	CARBON	330K 5% 1/4W	R1205	1-249-428-11	CARBON	8.2K 5% 1/4W
R812	1-249-421-11	CARBON	2.2K 5% 1/4W				
R813	1-215-867-00	METAL OXIDE	470 5% 1W F				
R814	1-249-411-11	CARBON	330 5% 1/4W				
R816	1-215-917-11	METAL OXIDE	1K 5% 3W F				
R817	1-216-481-11	METAL OXIDE	1.2K 5% 3W F				





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specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1206	1-249-428-11	CARBON	8.2K 5% 1/4W	< DIODE >			
R1208	1-212-849-00	FUSIBLE	4.7 5% 1/4W F	D1701	8-719-991-33	DIODE 1SS133T-77	
R1209	1-212-849-00	FUSIBLE	4.7 5% 1/4W F	D1702	8-719-110-88	DIODE RD39ES-B2	
R1211	1-249-424-11	CARBON	3.9K 5% 1/4W	D1703	8-719-110-88	DIODE RD39ES-B2	
R1212	1-249-424-11	CARBON	3.9K 5% 1/4W	< COIL >			
R1213	1-249-421-11	CARBON	2.2K 5% 1/4W	L1701	1-408-409-00	INDUCTOR	10UH
R1216	1-249-413-11	CARBON	470 5% 1/4W	L1702	1-408-403-00	INDUCTOR	3.3UH
R1217	1-249-425-11	CARBON	4.7K 5% 1/4W	L1703	1-408-409-00	INDUCTOR	10UH
< RELAY >				L1704	1-408-418-00	INDUCTOR	56UH
RY600	$\Delta$ 1-755-018-11	RELAY		L1705	1-408-418-00	INDUCTOR	56UH
< SWITCH >				< TRANSISTOR >			
S601	$\Delta$ 1-571-433-21	SWITCH, PUSH (AC POWER)		Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
S900	1-692-979-11	SWITCH, TACTILE		Q1702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
S901	1-692-979-11	SWITCH, TACTILE		Q1703	8-729-017-05	TRANSISTOR 2SA1837	
S902	1-692-979-11	SWITCH, TACTILE		Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
< SPARK GAP >				Q1706	8-729-017-06	TRANSISTOR 2SC4793	
SG801	1-519-422-11	GAP, SPARK		Q1708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
< TRANSFORMER >				Q1709	8-729-119-78	TRANSISTOR 2SC2785-HFE	
LF600	$\Delta$ 1-421-776-21	LFT		Q1840	8-729-119-78	TRANSISTOR 2SC2785-HFE	
LF601	$\Delta$ 1-421-776-21	LFT		< RESISTOR >			
T601	$\Delta$ 1-429-605-11	SRT		R1701	1-249-417-11	CARBON	1K 5% 1/4W
T800	1-424-545-11	TRANSFORMER, FERRITE (PMT)		R1702	1-249-417-11	CARBON	1K 5% 1/4W
T803	$\Delta$ 1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)		R1703	1-249-421-11	CARBON	2.2K 5% 1/4W
T804	1-437-090-31	HDT		R1704	1-249-415-11	CARBON	680 5% 1/4W
< THERMISTOR >				R1705	1-247-815-91	CARBON	220 5% 1/4W
THP600	$\Delta$ 1-809-827-11	THERMISTOR, POSITIVE		R1706	1-247-815-91	CARBON	220 5% 1/4W
*****				R1708	1-249-412-11	CARBON	390 5% 1/4W
*A-1644-070-A VM BOARD, COMPLETE				R1712	1-260-311-11	CARBON	39 5% 1/2W
*****				R1713	1-249-384-11	CARBON	1.8 5% 1/4W F
*4-368-683-11 SPRING, TRANSISTOR				R1714	1-249-414-11	CARBON	560 5% 1/4W F
< CAPACITOR >				R1715	1-249-432-11	CARBON	18K 5% 1/4W
C1701	1-126-933-11	ELECT	100MF 20% 16V	R1716	1-249-417-11	CARBON	1K 5% 1/4W F
C1702	1-128-551-11	ELECT	22MF 20% 25V	R1717	1-216-476-11	METAL OXIDE	180 5% 3W F
C1703	1-126-933-11	ELECT	100MF 20% 16V	R1718	1-249-432-11	CARBON	18K 5% 1/4W
C1704	1-137-403-51	FILM	0.47MF 5% 100V	R1719	1-249-384-11	CARBON	1.8 5% 1/4W F
C1705	1-107-638-11	ELECT	33MF 20% 160V	R1720	1-249-400-11	CARBON	39 5% 1/4W F
C1706	1-104-999-11	FILM	0.1MF 5% 200V	R1721	1-249-414-11	CARBON	560 5% 1/4W
C1707	1-137-397-11	FILM	0.047MF 5% 100V	R1722	1-249-401-11	CARBON	47 5% 1/4W
C1708	1-137-364-11	FILM	0.001MF 5% 50V	R1724	1-249-400-11	CARBON	39 5% 1/4W
C1709	1-137-364-11	FILM	0.001MF 5% 50V	R1725	1-216-451-11	METAL OXIDE	120 5% 2W F
C1710	1-102-074-00	CERAMIC	0.001MF 10% 50V	R1728	1-249-413-11	CARBON	470 5% 1/4W
C1720	1-107-667-11	ELECT	2.2MF 20% 160V	R1729	1-249-413-11	CARBON	470 5% 1/4W
C1721	1-137-397-11	FILM	0.047MF 5% 100V	R1730	1-249-422-11	CARBON	2.7K 5% 1/4W
C1722	1-126-934-11	ELECT	220MF 20% 16V	R1731	1-249-411-11	CARBON	330 5% 1/4W
C1723	1-161-830-00	CERAMIC	0.0047MF 500V	*****			
C1725	1-128-551-11	ELECT	22MF 20% 25V				
C1726	1-126-934-11	ELECT	220MF 20% 16V				
< CONNECTOR >							
CN1015	*1-568-880-51	PIN, CONNECTOR 5P					
CN1718	1-774-418-11	CONNECTOR, BOARD TO BOARD 8P					

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION
MISCELLANEOUS						
*****						
	1-406-807-11	COIL, DEGAUSSING				
	1-452-032-00	MAGNET, DISK; 10MM Ø				
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø				
	1-453-169-11	TRANSFORMER ASSY, FLYBACK(NX-1604A2)				
	1-504-146-11	SPEAKER (5x11CM)				
	1-571-433-21	SWITCH, PUSH (AC POWER)				
	1-693-338-11	TUNER/VIF (ARP) (KV-29C1A/29C1D/29C1E/29C1K/ 29C1R)				
	1-693-340-11	TUNER/VIF (FR) (KV-29C1B)				
	1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V (KV-29C1A/29C1D/29C1D1)				
	1-690-270-21	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-29C1B/29C1E/29C1K/29C1R)				
	8-451-467-11	DEFLECTION YOKE (Y29GXA2B)				
	8-453-005-11	NECK ASSY, PICTURE TUBE (NA-297-M)				
V901	8-733-856-05	PICTURE TUBE (SD-269) (M68LCT60X)				
	8-733-856-71	ITC				
*****						
ACCESSORIES AND PACKING MATERIALS						
*****						
	4-203-366-41	MANUAL, INSTRUCTION (KV-29C1A) (ITALIAN)				
	4-203-366-51	MANUAL, INSTRUCTION (KV-29C1B) (FRENCH/GERMAN/ITALIAN/DUTCH)				
	4-203-366-11	MANUAL, INSTRUCTION (KV-29C1D) (DUTCH/GREEK/ENGLISH/GERMAN/TURKISH)				
	4-203-372-11	MANUAL, INSTRUCTION (KV-29C1D) (ENGLISH/DUTCH)				
	4-203-366-71	MANUAL, INSTRUCTION (KV-29C1E) (SPANISH)				
	4-203-366-81	MANUAL, INSTRUCTION (KV-29C1E) (PORTUGUESE/FINNISH/DANISH/NORWEGIAN/ SWEDISH)				
	4-203-366-91	MANUAL, INSTRUCTION (KV-29C1K/29C1R) (CZECH/ENGLISH/POLISH/BULGARIAN/ RUSSIAN)				
	*4-203-331-01	INDIVIDUAL CARTON				
	*4-203-334-01	CUSHION (LOWER) (ASSY)				
	*4-203-335-01	CUSHION (UPPER) (ASSY)				
	*4-395-957-01	BAG, PROTECTION				
REMOTE COMMANDER						
*****						
	1-473-693-11	COMMANDER, STANDARD TYPE (RM-839)				
*****						